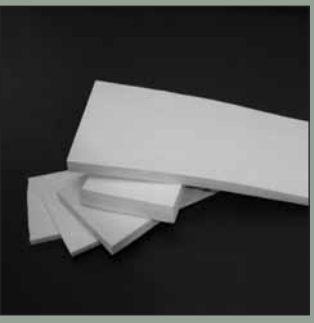

Reichelt
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THOMAPLAST® II

Semi-Finished Products

Tapes, Foils and Plates

Wires, Rods and Pipes

Cords and Profiles

Materials:

Elastomers, Plastics, Glass Fibre, Ceramic, Metals, Foam Rubbers, Synthetic, Natural Materials

Reichelt Chemietechnik ’15

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Content: Semi-Finished Products

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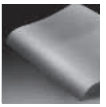
Tapes (0.025 - 8.0 mm)

Tapes: sealing, protection, adhesive, high-temperature, slip adhesive, foam adhesive single- and double-coated

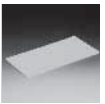
- Elastomers and Plastics: 3 - 11
  PTFE, PE, PVC, PETP, polyester, PI, paper, silicone, PET, CR, PUR, LDPE, PE
- Glass Fibre and Ceramic 12 - 14
- Metals: aluminium, copper 14



Foils (0.002 - 2.0 mm)

Films, thermo foils, thermo caps, self-adhesive on one side or on both sides

- Elastomers: silicone 15 - 17
- Plastics: 17 - 24
  CA, ECTFE, FEP, PA, PC, PE, PEEK, PES, PETP, PI, PP, PTFE, PVDF, TPX
- Glass Fabric 24 - 27
- Metals: 27 - 30
  aluminium, copper, graphite, iron, stainless steel, zinc



Plates (0.1 - 60 mm)

- Elastomers: 30 - 50
  IIR, PTFE, CR, SBR, CSM, EPDM, PP, FPM, NBR, NR, PUR (Vulkollan®), PVC, silicone
  shore hardness: 25° - 90°
- Foam Rubbers: 50 - 60
  CR, EPDM, FPM, NBR, NR, PUR, PE, PEUR, silicone
- Plastics: 60 - 71
  PA, PC, PCTFE, PE, HDPE, PEEK, PI, PMMA, POM, PP, PS, PTFE, PVC-rigid, PVDF
- Ceramic, Synthetic and Natural Materials: 72 - 74
  glass ceramic, aramid, graphite, cork, synthetic, vulcanized fibre
- Metals: 74 - 76
  aluminium, stainless steel, copper, brass, steel

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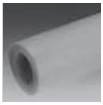
Welding Wires (2.0 - 3.5 mm) 76 - 78

- HDPE, PP, PVC-rigid, MFA, PFA, PVDF

Rods (2 - 210 mm)

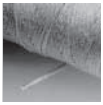
solid rod, square rod

- Elastomers, Plastics and Glass Ceramic 78 - 90
  PA, PC, PCTFE, PEEK, PI, PMMA, POM, PP, PTFE, PUR (Vulkollan®), PVC-rigid, PVDF
- Metals: 90 - 92
  aluminium, stainless steel, copper, brass



Pipes (4 - 112 mm) 92 - 96

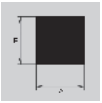
- PA, PTFE, PUR (Vulkollan®), PVC-rigid



Cords (0.8 - 30 mm) 96 - 107

round cord, foam rubber round cord

- CR, EPDM, EPDM/PP, FPM, NBR, NR, silicone, TPE, PTFE,
  glass fibre fabric, ceramic fabric, stainless steel



Profiles 107 - 112

rectangular, triangular, U-profile

- Elastomers: CR, EPDM, EPDM/PP, NBR

further components of our Profile Program: see THOMAPLAST®-Handbook III

Tapes (0.025 - 8.0 mm)
Elastomers and Plastics

THOMAPLAST®-High-Tech PTFE Sealing Tape

Application area
- For sealing of threads at distilleries, hydraulic systems, fuel and chemical pipelines, lubricant piping, steam and hot water pipelines.

Product specification
- Very good chemical resistance
- Outstanding temperature resistance
- Very good dielectric properties
- Very good coefficient of sliding friction
- Antiadhesive surface

Technical specification
- **Material:** PTFE (polytetrafluoroethylene)
- **Colour:** white
- **Temperature range:** -200 to +260 °C
- **Thickness:** 0.08 mm
- **Design:** non-sintered and soft

Item	Width mm	Thickness mm	Length m	Unit piece	Price EURO
301190	6.4	0.08	13.7	1	21.00
301191	9.5	0.08	13.7	1	24.00
301192	12.7	0.08	13.7	1	24.00
301193	19	0.08	13.7	1	29.00
301194	25.4	0.08	13.7	1	34.00
60361	12	0.1	12	3	39.00

THOMAPLAST®-Protection Tape made of PE

Application area
- Protective film for brushed metals
- Protective film for polished metals
- Cutting and bending of plastics
- Particularly suited for plastics such as PMMA, polystyrene and PVC
- For use in automotive area
- For prevention of bubbling during the laser cutting process

Product specification
- Good UV resistance, oil resistant
- Extraordinary adhesive power
- Removable without leaving adhesive residues

Technical specification
- **Material:** PE (polyethylene)
- **Colour:** one side black, one side white
- **Adhesive:** acrylic
- **Design:** adhesive surface on one side

Item	Width mm	Thickness mm	Length m	Unit piece	Price EURO
340467	200	0.08	200	1	78.00

THOMAPLAST®-Adhesive Tape made of PVC - single-coated

Product specification
- Good mechanical strength
- High dimensional stability
- Very good dielectric properties
- Hardly inflammable
- Resistant to weather
- Usable at low temperatures
- Good chemical resistance

Technical specification
- **Material:** PVC (polyvinyl chloride)
- **Colour:** silvery-grey
- **Temperature range:** -25 to +60 °C
- **Thickness:** 0.2 mm
- **Adhesive power:** up to 250 g/cm
- **Breakdown voltage:** 12,000 V
- **Tensile strength:** 180 %
- **Design:** soft, self-adhesive on one side

Item	Width mm	Thickness mm	Length m	Unit piece	Price EURO
13833	10	0.2	10	1	29.00
13834	15	0.2	15	1	34.00
13835	20	0.2	20	1	39.00
13836	25	0.2	25	1	41.00
13837	30	0.2	30	1	44.00
13838	40	0.2	40	1	54.00
13839	50	0.2	50	1	59.00
13840	60	0.2	60	1	67.00
13841	70	0.2	70	1	69.00
13842	80	0.2	80	1	82.00
13843	100	0.2	100	1	95.00

THOMAPLAST®-Adhesive Tape made of PVC - double-coated

Application area
- Bonding and fixing of mounting components
- Fixing and fastening of conduits and trunking
- Fixing and bonding of mounting rails
- Bonding of mouldings in furniture industry
- Fastening of components in electrical engineering and electronic engineering

Product specification
- Outstandingly suitable for durable connection of different materials such as metals, plastics, rubber, glass, wood and paper.

Technical specification
- **Material:** PVC (Polyvinylchloride)
- **Colour:** white
- **Temperature range:** -40 to +110 °C
- **Adhesive:** acrylate
- **Thickness:** 0.275 mm
- **Peel strength:** 40 N / 25 mm (on steel - AFERA 4001)
- **Shear strength:** 45 N / 625 mm² at +20 °C (AFERA 4012)
- **Design:** adhesive surface on both sides

Item	Width mm	Thickness mm	Length m	Unit piece	Price EURO
340478	12	0.275	50	1	36.00
340479	15	0.275	50	1	44.00
340480	19	0.275	50	1	52.00
340481	25	0.275	50	1	70.00

THOMAPLAST®-Assembly Adhesive Tape made of PVC

Application area
- For covering and protection of sensitive surfaces in assembly and production processes.

Product specification
- High-power adhesive tape
- UV-resistant
- Resistant to weather
- Adhesive coating leaves no residues on the masked surface when removing the tape

Technical specification
- **Material:** Hard-PVC (polyvinyl chloride)
- **Colour:** blue-transparent
- **Temperature range:** -5 to +50 °C, for a short time +70 °C
- **Adhesive:** rubber
- **Adhesive layer:** 0.06 mm
- **Adhesion:** 1.5 N / 25 mm
- **Design:** adhesive surface on one side

Item	Width mm	Thickness mm	Length m	Unit piece	Price EURO
340432	25	0.065	66	1	25.00
340433	50	0.065	66	1	38.00
340434	100	0.065	66	1	49.00

THOMAPLAST®-Assembly Adhesive Tape made of PETP

Product specification
- Very low creeping tendency
- High dimensional stability and wear-resistance
- Good mechanical stability
- Good coefficient of sliding friction
- Very high stiffness and hardness
- Good temperature resistance
- Not resistant to hydrolysis
- Good abrasion resistance
- Good resistance to UV-radiation and weather
- Self-extinguishing
- Unstable to halogenated solutions as well as conc. alkalis and mineral acids
- Universal insulation tape in electrical engineering for roller-type capacitors, cable connections, and for use as protective film
- For covering of masks during marking, coating and spraying
- As vacuum bag for composite manufacturing of laminates
- As protective film for electronic prints

Technical specification
- **Material:** PETP (polyethylene-terephthalate)
- **Colour:** yellow
- **Design:** self-adhesive (rubber adhesive, heat-curing)
- **Adhesive layer:** approx. 0.04 mm
- **Density:** 1.37 g/cm³ (DIN 53479)
- **Temperature range:** -18 to +163 °C
- **Dielectric strength:** 60 kV/mm

Item	Width mm	Thickness mm	Length m	Unit piece	Price EURO
301127	25.4	0.025	66	1	100.00
301128	50.8	0.025	66	1	144.00

Item	Width mm	Thickness mm	Length m	Unit piece	Price EURO
301129	25.4	0.051	66	1	136.00
301130	50.8	0.051	66	1	195.00

THOMAPLAST®-Adhesive Tape made of Polyester

Product specification
- This all-purpose tape is suitable for the most masking applications including powder coatings and anodizing.
- The tape is easy to apply and therefore particularly suitable for urgent applications.
- Good conformability und high abrasion resistance
- No shrinkage at elevated temperatures
- Clean and residue-free removal
- Very good chemical resistance

Technical specification
- **Material:** polyester
- **Max. temperature:** +180 °C
- **Adhesive:** silicone
- **Dielectric strength:** 6.5 V
- **Breaking strength:** 8.9 kg/cm
- **Storage:** outside direct solar radiation, at +21 °C and 50 % RH
- **Linear expansion:** 90 %
- **Adhesion to steel:**
  green tape: 0.35 kg/cm
  blue tape: 0.39 kg/cm

Item	Width mm	Thickness mm	Colour	Length m	Unit piece	Price EURO
315216	12	0.088	green	66	1	66.00
315217	18	0.088	green	66	1	98.00
315218	25	0.088	green	66	1	114.00
315219	30	0.088	green	66	1	130.00
315220	40	0.088	green	66	1	152.00
315221	50	0.088	green	66	1	172.00
315222	75	0.088	green	66	1	228.00
315223	100	0.088	green	66	1	304.00
340435	6	0.075	blue	66	1	42.00
332386	9	0.075	blue	66	1	60.00
315224	12	0.075	blue	66	1	82.00
332387	19	0.075	blue	66	1	114.00
332388	25	0.075	blue	66	1	148.00
315226	50	0.075	blue	66	1	168.00
340436	38	0.075	blue	66	1	198.00

THOMAPLAST®-Adhesive Tape made of PTFE

Application area
- Rolling technology, chemical engineering, plant construction, industrial engineering, process technology

Product specification
- Excellent thermal resistance
- Extremely thin adhesive tape
- Highest chemical resistance
- Low friction coefficient
- Good adhesive repellent properties
- Outstanding matching to uneven surfaces

Technical specification
- **Material:** PTFE (polytetrafluoroethylene)
- **Colour:** transparent/translucent
- **Temperature range:** -50 to +200 °C, for a short time up to+250 °C
- **Adhesive:** silicone
- **Thickness:** 0.09 mm
- **Stretching:** 150 %
- **Breaking load:** 385 N / 100 mm
- **Peel strength on steel:** 29 N / 100 mm

Item	Width mm	Thickness mm	Length m	Unit piece	Price EURO
340468	6	0.09	33	1	96.00
340469	9	0.09	33	1	124.00
340470	12	0.09	33	1	144.00
340471	15	0.09	33	1	168.00
340472	19	0.09	33	1	192.00
340430	25	0.09	33	1	244.00
340473	38	0.09	33	1	454.00
340431	50	0.09	33	1	478.00
340474	75	0.09	33	1	718.00

THOMAPLAST®-Adhesive Tape made of PI - Standard

Application area
- Semi-conductor industry, reactor construction, automobile and electrical industry, defense technology, chemical industry
- Especially suitable for masking of contacts during the soldering process on circuit boards (gold contacts)

Product specification
- High-power adhesive tape
- Outstandingly high operating temperature limit
- Remarkable mechanical stability
- Very good abrasion resistance
- Good chemical resistance

Technical specification
- **Material:** PI (polyimide)
- **Colour:** grey/white
- **Max. temperature:** +180 °C
- **Adhesive:** silicone
- **Peel strength:** 2.5 N (on steel)
- **Tensile strength:** 53 N
- **Insulation:** H
- **UL-listing:** UL510
- **Dielectrical strength:** 6,500 Volt
- **Design:** adhesive surface on one side

Item	Width mm	Thickness mm	Length m	Unit piece	Price EURO
340424	6	0.06	33	1	33.00
340425	9	0.06	33	1	47.00
340426	12	0.06	33	1	62.00
340427	15	0.06	33	1	76.00
332384	19	0.06	33	1	80.00
332385	25	0.06	33	1	124.00

THOMAPLAST®-Adhesive Tape made of PI - High-Temperature

Product specification
- These high-performance masking tapes can be used for a short time at temperatures up to +300 °C and in continuous use up to +260 °C
- Extremely resistant to chemicals and abrasion
- For powder coatings and galvanizations
- Clean and residue-free removal

Technical specification
- **Material:** PI (polyimide substrate)
- **Colour:** amber
- **Temperature range:** -250 to +260 °C, for a short time +300 °C
- **Adhesive:** silicone
- **Linear expansion:** 70 %
- **Storage:** outside direct solar radiation, at +21 °C and 50 % RH

Item	Width mm	Thickness mm	Length m	Unit piece	Price EURO
315210	12	0.063	33	1	148.00
315211	25	0.063	33	1	234.00
315212	50	0.063	33	1	424.00

THOMAPLAST®-Adhesive Tape made of Paper

Product specification
- Masking tape in three crepe paper designs for different temperature ranges from +80 to +180 °C
- All-purpose masking tape for the most low-temperature applications
- Usable with synthetic enamel paints, cellulose and acrylic lacquers

Technical specification
- **Material:** crepe paper
- **Colour:** white
- **Max. temperature:** +180 °C
- **Adhesive:**
  315227+315228: rubber
  315229+315230: silicone
- **Linear expansion:** 8 %
- **Storage:** outside direct solar radiation; at +21 °C and 50 % RH

Item	Width mm	Thickness mm	Length m	Max. temp. °C	Unit piece	Price EURO
315227	25	0.12	50	80	1	32.00
315228	25	0.55	50	135	1	34.00
315229[1]	18	0.14	50	180	1	70.00
315230[1]	25	0.14	50	180	1	96.00

[1] This masking tape is fitted with a silicone adhesive system particularly developed for high temperature coatings.

THOMAPLAST®-Adhesive Tape made of Silicone - self-fusing

Product specification
- The tape is self-fusing and self-adhering providing a void-free homogeneous wrapping
- It forms a homogeneous mass within 24 hours at room temperature or in 4 minutes at +180 °C
- Without adhesive, thus residue-free removal
- Can easily cover irregular shapes or uneven surfaces

Technical specification
- **Material:** silicone (silicone rubber)
- **Colour:** dark-red
- **Max. temperature:** +260 °C
- **Adhesive:** without
- **Linear expansion:** 300 %
- **Storage:** outside direct solar radiation; at +21 °C and 50 % RH

Item	Width mm	Thickness mm	Length m	Unit piece	Price EURO
315215	25.4	0.51	11	1	165.00

THOMAPLAST®-High-Power Adhesive Tape made of PET – double-coated

Application area

- Electronics and electrical engineering, for permanent bonding of smallest components
- For vibration damping, and as sealing element in machine engineering and precision mechanics
- As construction tape in chemical engineering and apparatus construction

General product specification

- The bonding technique allows the use in applications where the mechanical joining techniques such as screwing, riveting, clipping or welding etc. were preferred up to now.
- The film thickness allows a permanent bonding of materials without substantially increasing the overall thickness of the component.
- The joinings are invisible due to the transparency of the adhesive film. The extremely thin adhesive film simplifies the adhesion of round components with tight radii.
- The bonding technique ensures the vibration damping and the sealing function, thus preventing the intrusion of liquids and dust.
- The adhesive tape is resistant to plasticizers.
- The adhesive surface guarantees constant force distribution.
- No material deformation
- No stress cracking
- Highest final adhesive strength and adaptability
- The adhesive tape should be stored at a relative air humidity of 50 % and a storage temperature of approx. +20 °C.
- Chemical-resistant to most alkalis, acids, and solvents

THOMAPLAST®-High-Power Adhesive Tape made of PET up to +90 °C - double-coated, thickness: 0.5 mm

Product specification

- Good temperature resistance
- Suitable for bonding of acrylic materials and glass

Technical specification

- **Material:** PET (polyester)
- **Colour:** highly transparent
- **Cover:** PE paper, (PP film) siliconized on both sides
- **Adhesive:** polyacrylic-based high-performance adhesive
- **Peel strength:** 148 N / 100 mm (on steel - AFERA 4001)
- **Shear strength:** 75 N / 625 mm² at +20 °C (AFERA 2012)
- **Temperature range:** -40 to +90 °C, for a short time up to+150 °C

Item	Width mm	Thickness mm	Length m	Unit piece	Price EURO
340494	9	0.5	33	1	66.00
340495	15	0.5	33	1	84.00
340496	19	0.5	33	1	96.00
340497	25	0.5	33	1	122.00
340498	30	0.5	33	1	142.00
340499	38	0.5	33	1	178.00

THOMAPLAST®-High-Power Adhesive Tape made of PET up to +90 °C - double-coated, thickness: 1 mm

Product specification

- Good temperature resistance
- Suitable for bonding of acrylic materials and glass

Technical specification

- **Material:** PET (polyester)
- **Colour:** highly transparent
- **Cover:** PE paper, (PP film) siliconized on both sides
- **Adhesive:** polyacrylic-based high-performance adhesive
- **Peel strength:** 172 N / 100 mm (on steel - AFERA 4001)
- **Shear strength:** 45 N / 625 mm² at +20 °C (AFERA 2012)
- **Temperature range:** -40 to +90 °C, for a short time up to+150 °C

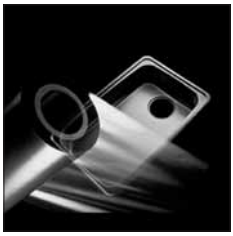
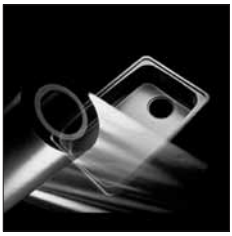
Item	Width mm	Thickness mm	Length m	Unit piece	Price EURO
340500	6	1	33	1	62.00
340501	9	1	33	1	88.00
340502	12	1	33	1	98.00
340503	15	1	33	1	116.00
340504	19	1	33	1	144.00
340505	25	1	33	1	176.00

THOMAPLAST®-High-Power Adhesive Tape made of PET up to +150 °C - double-coated

Product specification

- High temperature resistance
- The high-performance adhesive tape is particularly suited for bonding high-energy materials, such as metal, non-ferrous metals, wood, glass, ceramics, plastics like ABS, PC, PMMA, PVC etc.

Technical specification
- **Material:** PET (polyester special compound)
- **Colour:** highly transparent
- **Temperature range:** -40 to +150 °C, for a short time up to +260 °C
- **Adhesive:** acrylate
- **Thickness:** 0.25 mm
- **Peel strength:** 128 N / 100 mm (on steel - AFERA 4001)
- **Shear strength:** 75 N / 625 mm² at +20 °C (AFERA 2012)

Item	Width mm	Thickness mm	Length m	Unit piece	Price EURO
340488	6	0.25	55	1	42.00
340489	9	0.25	55	1	62.00
340490	12	0.25	55	1	80.00
340491	15	0.25	55	1	92.00
340492	19	0.25	55	1	116.00
340493	25	0.25	55	1	148.00

THOMAPLAST®-Slip Adhesive Tape made of PE

Application area
- As slip layer without higher loading, e.g. in conveying channels, funnels, guides of packaging machines.
- As antiadhesive and separating layer of filling stations and working devices in direct contact with sticky goods, food or pharmaceutical products.
- As antiadhesive coating at measuring devices and sports articles used in the winter season, as no adherence of snow or ice occurs.

Product specification
- Good coefficient of sliding friction (low cohesive friction)
- Good abrasion resistance
- Good impact toughness
- Good dielectric properties
- Antiadhesive surface
- Good mechanical stability
- Self-lubricating effect, extremely good sliding properties

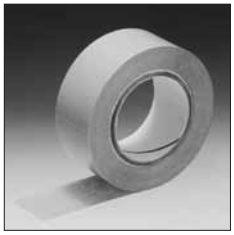
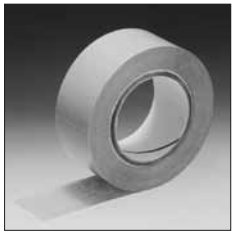
Technical specification
- **Material:** UHMW-PE (polyethylene of ultrahigh molecular weight)
- **Colour:** transparent/translucent, with blue carrier ribbon
- **Temperature range:** -40 to +107 °C
- **Adhesive:** acrylic
- **Adhesive layer:** approx. 0.05 mm
- **Peel strength on steel:** 19.8 N / 25 mm
- **Shear strength:** 15.2 kPa
- **Design:** sliced, self-adhesive

Item	Width mm	Thickness mm	Length m	Unit piece	Price EURO
340421	9	0.125	33	1	58.00
340422	19	0.125	33	1	118.00
340423	25	0.125	33	1	154.00
301162	12.7	0.25	33	1	70.00
301163	25.4	0.25	33	1	100.00
301164	50.8	0.25	33	1	169.00
301165	76.2	0.25	33	1	228.00
301166	101.6	0.25	33	1	274.00

THOMAPLAST®-Slip Adhesive Tape made of PTFE - Standard

Product specification
- Extraordinary chemical resistance
- Very good temperature resistance
- Extremely low sliding friction
- Very good dielectrical properties
- Super smooth surface, antiadhesive, extremely low sliding friction, very good chemical resistance and dielectrical properties
- As slide coating for very light goods in funnels, shutes etc.; as anti-stick and separating coating for moulding procedures, food, lab processes etc.; as electrical insulation foil

Technical specification
- **Material:** PTFE (polytetrafluoroethylene)
- **Colour:** white
- **Temperature range:** -90 to +140 °C
- **Adhesive:** one-sided with acryl-contact adhesive and protective film
- **Adhesive layer:** approx. 0.05 mm
- **Design:** multi-laminar cast

Item	Width mm	Thickness mm	Length m	Price EURO
60364	6.35	0.1	10	95.00
60365	12.7	0.1	10	116.00
60367	15.9	0.1	10	144.00
60368	19.05	0.1	10	174.00
60369	25.4	0.1	10	236.00
60370	50.8	0.1	5	236.00

Item	Width mm	Thickness mm	Length m	Price EURO
60371	76.2	0.1	3	210.00
60372	101.6	0.1	3	271.00
60374	304.8	0.1	1	274.00

THOMAPLAST®-Slip Adhesive Tape made of PTFE - High-Temperature

Product specification

- Extraordinary chemical resistance
- Very good temperature resistance
- Extremely low sliding friction
- Extremely antiadhesive surface
- Very good dielectrical properties
- Non-toxic
- Suitable as heat-resistant, electrically insulating film

Technical specification

- **Material:** PTFE (polytetrafluoroethylene)
- **Colour:** grey
- **Temperature range:** -73 to +260 °C
- **Adhesive:** silicone adhesive
- **Adhesive layer:** approx. 0.045 mm
- **Elongation:** 300 - 450 %
- **Design:** sliced, self-adhesive on one side, with protective foil

Item	Width mm	Thickness mm	Tensile strength N/cm	Adhesive strength N/cm	Length m	Price EURO
301169	10	0.08	35	5.4	33	39.00
301170	30	0.08	35	5.4	33	120.00
301171	50	0.08	35	5.4	33	151.00
301172	100	0.08	35	5.4	33	293.00
301173	10	0.25	96	5.9	33	79.00
301174	30	0.25	96	5.9	33	240.00
301175	50	0.25	96	5.9	33	348.00
301176	80	0.25	96	5.9	33	623.00
301177	100	0.25	96	5.9	33	696.00
301178	10	0.5	184	6.8	33	108.00
301179	30	0.5	184	6.8	33	326.00
301180	50	0.5	184	6.8	33	473.00
301181	80	0.5	184	6.8	33	757.00
301182	100	0.5	184	6.8	33	947.00

THOMAPLAST®-Foam Adhesive Tape made of CR

Product specification

- Good elastic behaviour
- Good abrasion resistance
- Good thermal resistance
- Good resistance to ozone, aging, and weather
- High flame resistance
- Good chemical resistance to dilute acids and alkalis

Technical specification

- **Material:** CR (chloroprene rubber)
- **Colour:** black
- **Temperature range:** -30 to +100 °C; adhesive power declining from +70 °C onwards
- **Adhesive:** synthetic resin, stringy
- **Density:** approx. 170 kg/m^3
- **Tolerance:** DIN 7715 T5 P3
- **Design:** foamed, self-adhesive on one side, closed-cell; cover PE foil

Item	Width mm	Thickness mm	Length m	Unit piece	Price EURO
13844	9	2	10	1	44.00
13845	12	2	10	1	46.00
13846	15	2	10	1	49.00
13847	20	2	10	1	64.00
13848	25	2	10	1	77.00
13849	30	2	10	1	90.00
13850	40	2	10	1	120.00
13851	12	3	10	1	59.00
13852	15	3	10	1	67.00
13853	20	3	10	1	87.00
13854	9	4	10	1	54.00
13855	12	4	10	1	62.00
13856	15	4	10	1	75.00
13857	19	4	10	1	95.00
13858	25	4	10	1	118.00
13859	30	4	10	1	146.00

THOMAPLAST®-Foam Adhesive Tape made of PUR

Product specification
- Very high mechanical strength
- Excellent wear-resistance
- Good resistance to aging and ozone
- Good resistance to mineral oil
- Low permeability to gases

Technical specification
- **Material:** PUR (polyurethane)
- **Colour:** white
- **Temperature range:** -30 to +100 °C; (adhesive power declining at +70 °C)
- **Density:** 30 kg/m^3
- **Adhesive:** synthetic resin, stringy
- **Tolerance:** DIN 7717 T3 E3
- **Design:** foamed, self-adhesive on one side (cover: PE-foil)

Item	Width mm	Thickness mm	Length m	Unit piece	Price EURO
13860	9	3	10	1	54.00
13861	12	3	10	1	62.00
13862	15	3	10	1	67.00
13863	19	3	10	1	69.00
13864	30	3	10	1	90.00
13865	12	6	10	1	62.00
13866	15	6	10	1	67.00
13867	19	6	10	1	75.00
13868	15	8	5	1	85.00
13869	20	8	5	1	100.00
13871	30	8	5	1	126.00

THOMAPLAST®-Foam Adhesive Tape made of LDPE - single-coated

Product specification
- Good impact toughness
- Good resistance to weather
- Antiadhesive surface
- Good chemical resistance

Technical specification
- **Material:** LDPE (plasticized polyethylene)
- **Colour:** white
- **Temperature range:** -40 to +80 °C; (adhesive power declining at +70 °C)
- **Density:** approx. 45 kg/m^3
- **Adhesive:** synthetic resin, stringy
- **Tolerance:** DIN 7717 T3 E3
- **Design:** foamed, self-adhesive on one side

Item	Width mm	Thickness mm	Length m	Unit piece	Price EURO
13872	10	3	10	1	62.00
13873	12	3	10	1	72.00
13874	15	3	10	1	90.00
13875	19	3	10	1	100.00
13876	25	3	10	1	115.00

THOMAPLAST®-Foam Adhesive Tape made of PE - double-coated

Application area
- Adhesive tape for indoor and outdoor applications.

Product specification
- The high performance acrylate adhesive realizes highest adhesive strength on different materials such as metal, plastics and glass.
- The adhesive bond ensures best damping and sealing properties.

Technical specification
- **Material:** PE-Foam (polyethylene)
- **Colour:** white
- **Max. temperature:** up to +70 °C; for a short time up to +90 °C
- **Adhesive:** acrylic
- **Thickness:** 1.0 mm
- **Peel strength on steel:** 28 N / 25 mm
- **Shear strength**: 45 N / 625 mm^2 (AFERA 4012 at +20 °C)
- **Design:** adhesive surface on both sides

Item	Width mm	Thickness mm	Length m	Unit piece	Price EURO
340482	6	1	50	1	34.00
340483	9	1	50	1	42.00
340484	15	1	50	1	48.00
340485	19	1	50	1	64.00
340486	25	1	50	1	84.00
340487	50	1	50	1	166.00

THOMAPLAST®-Foam Adhesive Tape made of Silicone

Product specification
- Very good elastic behaviour
- Excellent resistance to heat and hot air
- Best flexibility in the cold
- Very good resistance to ozone, aging, and weather
- Very good dielectrical properties
- Antiadhesive surface
- High permeability to gases

Technical specification

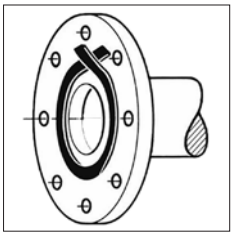
- **Material:** Si (silicone rubber)
- **Colour:** reddish brown
- **Temperature range:** -70 to +260 °C; adhesive power declining from +150 °C onwards
- **Density:** approx. 50 kg/m³
- **Adhesive:** silicone base
- **Tolerance:** DIN 7717 T3 E3
- **Design:** foamed, self-adhesive on one side, with protective foil

Item	Width mm	Thickness mm	Tolerance mm	Length m	Unit piece	Price EURO
13877	25	1.6	±0.4	9	1	200.00
13878	10	2.4	±0.4	9	1	136.00
13879	12	3.18	±0.8	9	1	167.00
13880	25	3.18	±0.8	9	1	241.00
13881	19	4.75	±0.8	4.5	1	167.00

THOMAPLAST®-PTFE Sealing Tape

Product specification

- Manufactured of virgin PTFE finest powder.
- Negative cold flow properties are strongly reduced by stretching of the fibre structure resulting in outstanding sealing properties.
- Resistant to aging, weather, ozone, and light, as it is produced without filler.
- Flat sealing tape (assembly tape) is fitted with adhesion strips for fastening.
- Irregularities are evened up by the tape.
- Larger uneven patches should be evened up with a thicker tape. If this is not sufficient, underfeeding is required.
- Good adhesion of the adhesive surface of the assembly tape on clean, dry sealing surface.
- The sealing tape (assembly tape) has to be put in place in such a way that the tape ends cross in front of a bolt.
- Impact use is not recommended.
- For use with glass fittings, a toothing or bevel cutting should be performed.



Technical specification

- **Material:** PTFE (polytetrafluoroethylene)
- **Material features:** soft and flexible
- **Colour:** white
- **Temperature range:** -240 to +260 °C
- **Insert:** none
- **Regulations:** TÜV inspection, BAM inspection, DVGW-registered

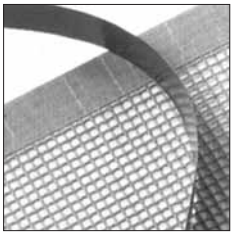
Item	Width mm	Thickness mm	Length m	Unit piece	Price EURO
19500	3	1.5	5	1	34.00
19501	3	1.5	10	1	62.00
19502	3	1.5	25	1	123.00
19503	5	2	5	1	44.00
19504	5	2	10	1	80.00
19505	5	2	25	1	167.00
19506	7	2.5	5	1	57.00
19507	7	2.5	10	1	98.00
19508	7	2.5	25	1	208.00
19509	10	3	5	1	80.00
19510	10	3	10	1	121.00
19511	10	3	25	1	223.00
19512	12	4	5	1	111.00
19513	12	4	10	1	192.00
19514	12	4	20	1	330.00
19515	14	5	5	1	123.00
19516	14	5	10	1	208.00
19517	14	5	20	1	343.00
19518	17	6	5	1	139.00
19519	17	6	10	1	233.00
19520	17	6	20	1	369.00
19521	20	7	5	1	169.00
19522	20	7	10	1	271.00
19523	20	7	20	1	407.00

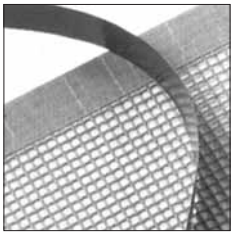
Glass Fibre and Ceramic

THOMAPLAST®-Glass Fibre Tape

Product specification

- Fastening of strip heaters, heating cables and heating mats up to temperatures of +450 °C.





Item	Width mm	Thickness mm	Length m	Unit piece	Price EURO
301639	12	0.2	10	1	47.00
301640	12	0.2	30	1	100.00

Item	Width mm	Thickness mm	Length m	Unit piece	Price EURO
301641	12	0.2	50	1	131.00
301642	20	0.2	10	1	95.00
301643	20	0.2	30	1	192.00
301644	20	0.2	50	1	233.00

THOMAPLAST®-Glass Fabric Adhesive Tape - High-Temperature

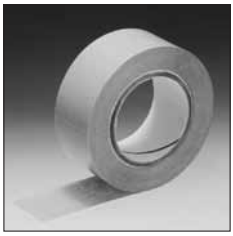
Product specification
- White glass fibre fabric, problem- and residue-free removal
- Resistant to solvents and abrasion
- The tightly interwoven glass fabric tape guarantees high tearing strength
- Can be used in high-pressure applications such as sand blasting
- Suitable as protection for powder coatings and wet paints

Technical specification
- **Material:** glass fabric
- **Colour:** white
- **Max. temperature:** +260 °C
- **Adhesive:** silicone
- **Linear expansion:** 5 %
- **Storage:** outside direct solar radiation; at +21 °C and 50 % RH

Item	Width mm	Thickness mm	Length m	Unit piece	Price EURO
315213	12	0.15	50	1	144.00
315214	25	0.15	50	1	236.00

THOMAPLAST®-Glass Fabric Adhesive Tape - PTFE-coated

Application area
- Industrial engineering, plant construction, chemical engineering, process technology
- Outstanding suitability for lining of transport guide rails, chutes, and skids
- Due to high temperature stability also usable for packers such as heat sealing devices, blister-foil packers, and tubing bag welders



Product specification
- Combines the chemical material properties of PTFE with the extraordinary strength of highly tension-proof glass cloth
- The material is best suited for heavy-duty insulations and cable sheathing due to its high dielectric strength together with excellent mechanical stability
- Adhesive repellent surface
- Highly tension-proof glass cloth, bonded with high-temperature-resistant silicone adhesive
- High dielectric strength
- Excellent chemical resistance
- High abrasion resistance and durability
- High tear resistance
- High antiadhesion
- Low friction
- Excellent thermal resistance
- Outstanding matching to uneven surfaces
- Low cold flow at pressure load
- Permanent dimensional stability

Technical specification
- **Material:** PTFE (polytetrafluoroethylene), combined with glass cloth compound
- **Colour:** yellow/brown
- **Max. temperature:** +200 °C, for a short time up to+250 °C
- **Adhesive:** silicone rubber
- **Thickness:** 0.150 mm
- **Peel strength:** 6.2 N/cm at +180 °C (ASTM D330)
- **Design:** adhesive surface on one side

Item	Width mm	Thickness mm	Length m	Unit piece	Price EURO
340428	9	0.15	33	1	152.00
340429	15	0.15	33	1	182.00
340475	19	0.15	33	1	204.00
340476	25	0.15	33	1	256.00
340477	70	0.15	33	1	768.00

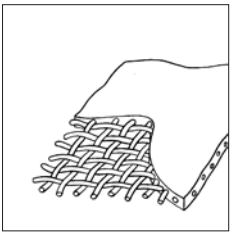
THOMAPLAST®-High-Tech Glass Tape - PTFE-Bonded, self-adhesive at one side

Application area:
- Self-adhesive, antiadhesive finish on foil welding devices, drying and coating cylinders, and drum dryers.
- Slip coating at chutes, funnels, guides, slide pipes at packaging machines.
- Self-adhesive insulation foil for electrical engineering, chemical and process engineering.

Product specification
- Extremely antiadhesive surface
- Minimal coefficient of sliding friction
- Extremely high temperature resistance
- Extraordinary chemical resistance
- High tensile strength and dimensional stability
- Low thermal expansion
- Good dielectric properties
- Transmissive for microwaves and UV-light
- Non-toxic
- Resistant to mildew, bacteria, and mould

Technical specification
- **Material:** PTFE (polytetrafluoroethylene)
- **Colour:** brown
- **Design:** PTFE-impregnated glass fabric, self-adhesive

- **Adhesive:** silicone adhesive, adhesive layer covered with removable PVC-film
- **Adhesive layer:** approx. 0.05 mm
- **Temperature range:** -73 to +260 °C
- **Type:**
  AP: Standard design. Colour brown. Cloth with surface finish suitable for most applications; good material combination of mechanical and antiadhesive properties.
  AAP: Cloth with especially high PTFE content and particularly smooth surface. Colour brown.



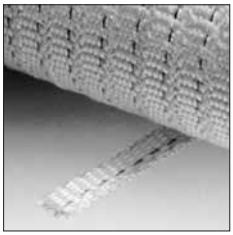
Item	Thickness mm	Width mm	Type	Length m	Unit piece	Price EURO
301198	0.073	13	AP	5	1	67.00
301199	0.073	13	AP	10	1	108.00
301200	0.073	25	AP	5	1	116.00
301201	0.073	25	AP	10	1	213.00
301202	0.073	50	AP	3	1	126.00
301203	0.073	50	AP	5	1	174.00
301204	0.073	100	AP	1	1	116.00
301205	0.073	100	AP	3	1	269.00
301206	0.073	200	AP	1	1	131.00
301207	0.073	200	AP	3	1	305.00
301208	0.122	13	AP	5	1	75.00
301209	0.122	13	AP	10	1	123.00
301210	0.122	25	AP	5	1	136.00
301211	0.122	25	AP	10	1	228.00
301212	0.122	50	AP	3	1	151.00
301213	0.122	50	AP	5	1	202.00
301214	0.122	100	AP	1	1	100.00
301215	0.122	100	AP	3	1	254.00
301216	0.122	300	AP	1	1	213.00
301217	0.122	300	AP	3	1	463.00
301218	0.152	25	AAP	5	1	151.00
301219	0.152	25	AAP	10	1	251.00
301220	0.152	50	AAP	3	1	167.00
301221	0.152	50	AAP	5	1	225.00
301222	0.235	13	AP	5	1	110.00
301223	0.235	13	AP	10	1	182.00
301224	0.235	25	AP	3	1	116.00
301225	0.235	25	AP	5	1	162.00
301226	0.235	50	AP	1	1	80.00
301227	0.235	50	AP	3	1	185.00
301228	0.235	100	AP	1	1	121.00
301229	0.235	100	AP	3	1	271.00

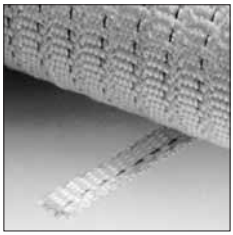
THOMAPLAST®-High-Therm-Glass Fibre Fabric Tape - asbestos-free

Application area
- Thermal insulating

Product specification
- Highest heat stability, very high mechanical stability
- Non-combustible
- Good chemical resistance, very high to oils, fats, alkalis, organic acids and vapors
- Fitted with strong selvages on both sides.

Technical specification
- **Material:** glass fibre, made of EC 9 filament yarn, textured
- **Special features:** asbestos-free
- **Temperature range:** -10 to +450 °C, for a short time +550 °C





Item	Thickness mm	Width mm	Length m	Unit piece	Price EURO
302297	2	20	2	1	41.00
302298	2	20	5	1	77.00
302299	2	30	2	1	50.00
302300	2	30	5	1	94.00
302301	2	40	2	1	62.00
302302	2	40	5	1	116.00
302303	2	50	2	1	78.00
302304	2	50	5	1	147.00
302309	2	100	2	1	145.00
302310	2	100	5	1	269.00
302311	3	20	2	1	45.00
302312	3	20	5	1	85.00
302313	3	30	2	1	60.00
302314	3	30	5	1	112.00
302315	3	40	2	1	74.00
302316	3	40	5	1	140.00
302317	3	50	2	1	90.00
302318	3	50	5	1	170.00
302323	3	100	2	1	172.00
302324	3	100	5	1	324.00

THOMAPLAST®-High-Therm-Ceramic Fabric Tape - asbestos-free

Product specification
- Absolutely highest heat stability
- Non-combustible
- Very high mechanical stability
- Good chemical resistance, very high to oils, fats, all chemicals, steam and water as well as liquid metals (aluminum, zinc etc.), not suitable for hydrofluoric acid, phosphoric acid, and some strong alkalis.

Technical specification
- **Material:** ceramic composition reinforced with chromium steel wire
- **Special features:** round and twisted, asbestos-free
- **Temperature range:** -10 to +1,100 °C

Item	Thickness mm	Width mm	Length m	Unit piece	Price EURO
302360	2	10	2	1	25.00
302361	2	10	5	1	48.00
302362	2	20	2	1	45.00
302363	2	20	5	1	85.00
302364	2	30	2	1	63.00
302365	2	30	5	1	117.00
302366	2	40	2	1	82.00
302367	2	40	5	1	123.00
302368	2	50	2	1	101.00
302369	2	50	5	1	189.00
302374	2	100	1	1	107.00
302375	2	100	3	1	248.00
302378	3	30	2	1	82.00
302379	3	30	5	1	154.00
302380	3	40	2	1	105.00
302381	3	40	5	1	197.00
302382	3	50	2	1	131.00
302383	3	50	5	1	247.00
302384	3	100	1	1	134.00
302385	3	100	3	1	311.00

Metals

THOMAPLAST®-Adhesive Tape made of Aluminum

Application area
- Application in the semiconductor technology, galvanic industry and electrical engineering
- For covering during galvanic processes and for the cavity sealing
- For sealing of pipes and containers during gas-shielded welding
- For lining of heat and air reflectors
- For sealing of reaction vessels

Product specification
- Absolutely gas- and steam-tight
- No restoring effect
- Hardly inflammable
- Diffusion resistant
- Resistant to UV-radiation
- Resistant to alkalis and acids
- Adhesive tape is available in two versions: with protective paper as interlayer or without protective paper

Technical specification
- **Material:** Al (aluminum)
- **Temperature range:** -50 to +150 °C; (301660: max. +90 °C)
- **Adhesive:** acrylic adhesive
- **Peel strength on steel:** 27 N / 25 mm
- **Breaking load:** 54 N / 25 mm
- **Design:** adhesive surface on one side

Item	Width mm	Thickness mm	Length m	Protective paper	Unit piece	Price EURO
340383	25	0.125	50	without	1	48.00
340381	38	0.075	50	with	1	58.00
340382	50	0.075	50	with	1	78.00
332389	50	0.125	50	with	1	72.00
340384	50	0.125	50	without	1	86.00
332390	100	0.125	50	with	1	144.00
301660	75	0.22	100	with	1	156.00

THOMAPLAST®-High-Therm Shielding Adhesive Tape made of Copper

Application area
- Electrical engineering, for EMC-compatible production

Product specification
- For dissipation of electrostatic charge
- For shielding of electromagnetic fields
- Very good solderability
- Flame-retardant according to UL
- Smooth foil

Technical specification
- **Material:** Cu (copper)
- **Temperature range:** -40 to +130 °C
- **Adhesion:** 10.2 N / 25 mm
- **Shear force:** 7.6 kPa
- **Surface resistivity:** 0.02 Ohm/2.5 cm^2
- **Design:** adhesive surface on one side

Item	Width mm	Thickness mm	Length m	Unit piece	Price EURO
332392	19	0.07	33	1	138.00
332393	25	0.07	33	1	182.00

Foils (0.002 - 2.0 mm)
Elastomers

THOMAPLAST®-Components for Insulation and Heat Technology in Electronic Engineering

General product specification

High-tech materials for heat problems in high-tech devices offer, compared to traditional use of mica with heat-conductive paste, the following important advantages:

- Specified layer thicknesses
- Quick and clean handling, superior process reliability
- Interchangeability of materials without surface treatment
- Safe reproducibility of results
- Please note also the silicone-free heat technology products such as waxed PI sheets and carbon foils or heat-conductive paste.

THOMAPLAST®-Thermo-Silicone Foil (1.9 W/mK)

Application area

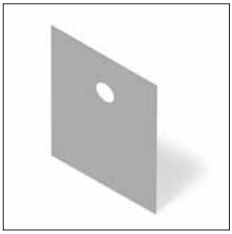
- Power semiconductors and power modules in power supply units, electric drives, telecommunications modules, motor control units, frequency converters, UPS (uninterrupted power supply)

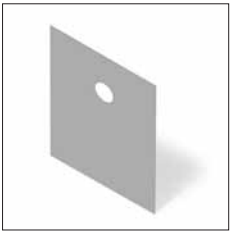
Product specification

- Extremely high thermal conductivity
- Very low total thermal transfer resistance
- Fibreglass reinforced for mechanical stability
- Very flexible
- Quick and clean handling, superior process reliability
- No thermal paste required

Technical specification

- **Material:** silicone, fibreglass reinforced
- **Colour:** salmon
- **Temperature range:** -60 to +200 °C
- **Filler:** thermally conductive ceramic
- **Tensile strength:** see table
- **Tear resistance:** see table
- **Hardness (Asker C):** 90
- **Dielectric constant:** 3.8 - 4.3 at 1 kHz
- **Volume resistivity:** 1.8 x 10^{12} to 1.0 x 10^{12} Ohm x m
- **Thermal conductivity:** 1.9 W/mK
- **Heat transfer resistance**: see table
- **Flammability rating:** UL 94 V-0





Item	Thick-ness mm	Tensile strength MPa	Tear resist. kN/m	Heat tr. resist.[1]	Dimensions mm	Price EURO
339567	0.2	25.9	70	0.3	320 x 1,000	186.00
339568	0.2	25.9	70	0.3	320 x 250	88.00
339569	0.3	24.1	69	0.45	320 x 1,000	210.00
339570	0.3	24.1	69	0.45	320 x 250	96.00
339571	0.45	20.4	68	0.65	320 x 1,000	330.00
339572	0.45	20.4	68	0.65	320 x 250	140.00
339573	0.8	9.3	24	1.05	320 x 1,000	546.00
339574	0.8	9.3	24	1.05	320 x 250	222.00

[1] Heat transfer resistance - $inch^2$ x °C/W

THOMAPLAST®-Soft-Silicone Film, Thermally Conductive (2.5 W/mK) - self-adhesive on one side

Application area

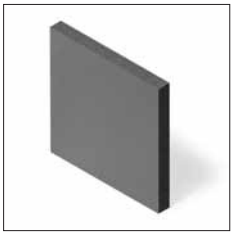
- SMD power modules, electrolytic capacitors, thermo sensors, high-power diodes, heat pipes, CD-ROM cooling, CPU modules, charging devices, UPS, SMPS, motor control units and cooling systems

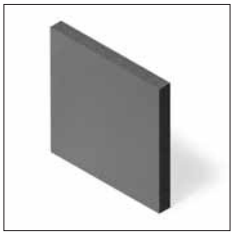
Product specification

- High thermal conductivity
- High dielectric strength
- Very flexible and elastic
- Self-adhesive on one side
- Quick and easy handling, superior process reliability
- Laminated for mechanical stability

Technical specification

- **Material:** soft silicone with thermally conductive ceramic reinforced by silicone film with high conductive ceramic
- **Colour:** brown/ light grey
- **Temperature range:** -60 to +180 °C
- **Hardness (Asker C):** 30
- **Volume resistivity:** 0.8 x 10^{11} to 0.38 x 10^{11} Ohm x m
- **Thermal conductivity:** 2.5 W/mK
- **Heat transfer resistance**: see table
- **Flammability rating:** UL 94 V-0





Item	Thickness mm	Tensile strength MPa	Heat transfer resistance[1]	Dimensions mm	Price EURO
339575	0.5	0.55	0.37	300 x 400	206.00
339576	0.5	0.55	0.37	150 x 200	98.00
339577	1	0.4	0.66	300 x 400	284.00
339578	1	0.4	0.66	150 x 200	128.00
339579	2	0.3	0.93	300 x 400	336.00
339580	2	0.3	0.93	150 x 200	148.00
339581	3	0.29	1.3	300 x 400	474.00
339582	3	0.29	1.3	150 x 200	202.00

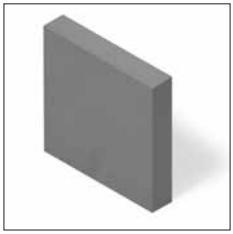
[1] $inch^2$ x °C/W

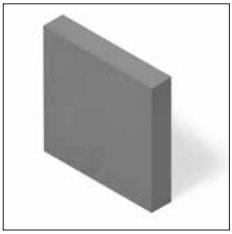
THOMAPLAST®-Soft-Silicone Film, Thermally Conductive (1.4 W/mK) - self-adhesive on both sides

Application area
- SMD power modules, electrolytic capacitors, thermo sensors, high-power diodes, heat pipes, CD-ROM cooling, CPU modules, charging devices, UPS, SMPS, motor control units and cooling systems

Product specification
- Good thermal conductivity
- Excellent dielectric strength
- Self-adhesive on both sides
- Available in a large thickness range

Technical specification
- **Material:** soft silicone with thermally conductive ceramic
- **Colour:** salmon
- **Temperature range:** -60 to +180 °C
- **Tensile strength:** 0.35 MPa
- **Hardness (Asker C):** 25
- **Volume resistivity:** 1.4 x 10^{12} Ohm x m
- **Thermal conductivity:** 1.4 W/mK
- **Flammability rating:** UL 94 V-0





Item	Thickness	Heat transfer resistance[1]	Dimensions	Price
	mm		mm	EURO
339599	0.5	0.75	300 x 400	136.00
339600	0.5	0.75	150 x 200	68.00
339601	1	1.2	300 x 400	198.00
339602	1	1.2	150 x 200	92.00
339603	2	1.75	300 x 400	230.00
339604	2	1.75	150 x 200	106.00
339605	3	2.46	300 x 400	287.00
339606	3	2.46	150 x 200	128.00
339607	4	2.92	300 x 400	364.00
339608	4	2.92	150 x 200	160.00
339609	5	3.35	300 x 400	428.00
339610	5	3.35	150 x 200	182.00

[1] $inch^2$ x °C/W

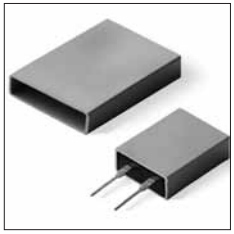
THOMAPLAST®-Thermo-Silicone Caps

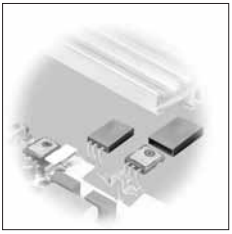
Application area
- Complete electric insulation of electronic components
- Protection from electrical voltage breakdowns
- Reduction of total thermal transfer resistance to cooling elements or casings
- Power semiconductors and power modules in power supply units
- Electronic drives, motor control units
- Telecommunications modules
- Frequency converters, UPS (uninterrupted power supply)

THOMAPLAST®-Thermo-Silicone Cap (1.5 W/mK)

Product specification
- High thermal conductivity
- Very low total thermal transfer resistance
- Safe and complete electric insulation
- High dielectric strength
- High flexibility
- Quick and clean handling, superior process reliability

Technical specification
- **Material:** silicone (silicone rubber)
- **Colour:** salmon
- **Temperature range:** -60 to +200 °C
- **Filler:** thermally conductive ceramic
- **Tensile strength:** 3.2 MPa
- **Tearing strength:** 10.0 kN/m
- **Volume resistivity:** 3.2 x 10^{12} Ohm x m
- **Dielectric constant:** 6.0 at 1 kHz
- **Thermal conductivity:** 1.5 W/mK
- **Flammability rating:** UL 94 V-0





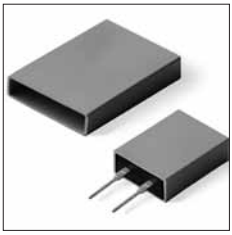
Item	Thick-ness	Heat transfer resistance[1]	Length	Width	Height	Unit	Price
	mm		mm	mm	mm	piece	EURO
339611	0.3	0.3	5.8	11.4	21.5	25	66.00
339612	0.45	0.42	5.8	11.4	21.5	25	78.00
339615	0.3	0.3	5.8	17.5	28.5	25	78.00
339616	0.45	0.42	5.8	17.5	28.5	25	82.00

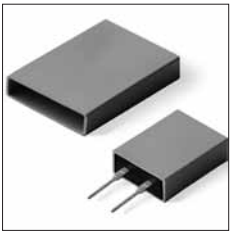
[1] $inch^2$ x °C/W

THOMAPLAST®-Thermo-Silicone Cap (1.1 W/mK)

Product specification
- Good thermal conductivity
- Low total thermal transfer resistance
- Safe and complete electric insulation
- Excellent dielectric strength
- High flexibility
- Quick and clean handling, superior process reliability

Technical specification
- **Material:** silicone (silicone rubber)
- **Colour:** grey
- **Temperature range:** -60 to +200 °C
- **Filler:** thermally conductive ceramic
- **Tensile strength:** 5.7 MPa
- **Tearing strength:** 8.0 kN/m
- **Volume resistivity:** 1.0 x 10^{12} Ohm x m
- **Dielectric constant:** 4.8 at 1 kHz
- **Thermal conductivity:** 1.1 W/mK
- **Flammability rating:** UL 94 V-0





Item	Thick-ness mm	Heat transfer resistance[1]	Length mm	Width mm	Height mm	Unit piece	Price EURO
339613	0.3	0.53	5.8	11.4	21.5	25	50.00
339614	0.45	0.74	5.8	11.4	21.5	25	60.00
339617	0.3	0.53	5.8	17.5	28.5	25	60.00
339618	0.45	0.74	5.8	17.5	28.5	25	62.00

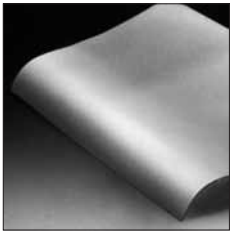
[1] $inch^2$ x °C/W

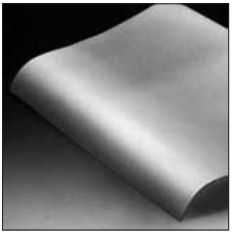
Plastics

THOMAFOIL-CA Film

Product specification
- Good UV resistance
- Good resistance to fats and oils, halogenes, aromatic hydrocarbons, not stable to acids, alkalis, alcohols

Technical specification
- **Material:** CA (cellulose acetate)
- **Density:** 1.3 g/cm^3
- **Dielectric constant:** approx. 5 at 1 MHz
- **Temperature range:** -20 to +50 °C, for a short time +95 °C
- **Permeability:**
  for carbon-dioxide: 5.5 x 10^{-10} cm^2 x s^{-1}/cm Hg
  for oxygen: 7 x 10^{-11} cm^2 x s^{-1}/cm Hg
- **Water absorption:** 1.9 - 7 % after 24 h



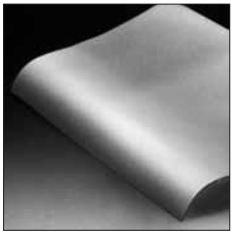


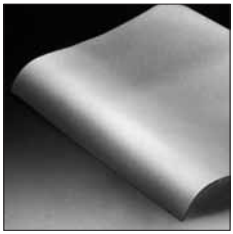
Item	Thickness mm	Weight g	Dimensions mm	Unit piece	Price EURO
48994	0.075	2.19	150 x 150	10	141.00
48995	0.075	8.77	300 x 300	5	100.00
48996	0.075	11.3	500 x 500	1	70.00
48997	0.5	6.5	100 x 100	1	64.00
48998	0.5	14.6	150 x 150	1	77.00
48999	0.5	39	200 x 300	1	121.00

THOMAFOIL-ECTFE Film

Product specification
- Good UV resistance
- Good resistance to greases and oils, alcohols, aromatic hydrocarbons, alkalis, and acids; not resistant to halogenes

Technical specification
- **Material:** ECTFE (ethylene-chlorofluoroethylene copolymer)
- **Temperature range:** -75 to +150 °C
- **Density:** 1.68 g/cm^3
- **Dielectric constant:** 2.3 - 2.5 at 1 MHz
- **Dielectric strength:** approx. 200 kV/mm
- **Surface resistivity:** >10^{14} Ohm/cm^2
- **Permeability for carbon-dioxide:** 6.6 x 10^{-11} cm^2 x s^{-1}/cm Hg
- **Permeability for oxygen:** 1.5 x 10^{-11} cm^2 x s^{-1}/cm Hg
- **Water absorption:** <0.02 % in 24 h





Item	Thickness mm	Weight g	Dimensions mm	Unit piece	Price EURO
48890	0.025	3.8	300 x 300	1	108.00
48891	0.025	15.1	600 x 600	1	223.00
48892	0.025	34	900 x 900	1	438.00

THOMAPLAST®-High-Tech FEP Film

Product specification
- Excellent resistance to weather and UV radiation
- Very well suited for heat sealing
- Heat formable and sealable
- Can be laminated with other materials
- High chemical resistance
- Good mechanical properties from low to high temperature range
- High dielectric strength and high insulating resistance
- Low dielectric loss factor
- Low-friction, not wettable surface

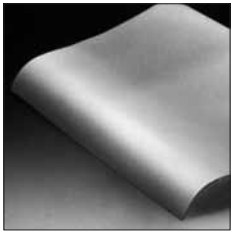
Technical specification
- **Material:** FEP (fluorinated ethylene-propylene)
- **Temperature range:** -200 to +250 °C (without loading)
- **Specific weight:** 2.12 - 2.17
- **Tearing strength:** 21 MPa
- **Elongation at break:** 250 - 300 %
- **Coefficient of sliding friction against steel (dry):** 0.06 - 0.09
- **Specific heat:** 1,172 J/kg x K
- **Coefficient of**
  thermal conductivity: 0.195 W/m x K
  thermal linear expansion: ≈10^{-4}/°C
- **Flammability rating:** UL 94 V-0
- **Dielectric strength:** 240 kV/mm
- **Dielectric constant:** 2.1 (at 1 kHz, RT)
- **Dielectric loss factor:** 0.0003 (at 1 kHz, RT)
- **Water absorption:** <0.01 %

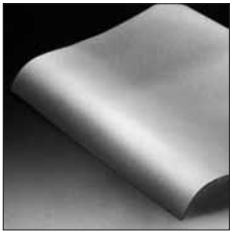
Item	Thickness mm	Dimensions mm	Price EURO
302459	0.025	150 x 1,000	32.00
302460	0.05	150 x 1,000	40.00
302462	0.25	150 x 1,000	117.00
302463	0.025	300 x 1,000	44.00
302464	0.05	300 x 1,000	59.00
302466	0.25	300 x 1,000	212.00

THOMAFOIL-PA Film (PA 6)

Product specification
- Low UV resistance
- Good resistance to aromatic hydrocarbons, halogenes, ketones, fats and oils, and diluted acids; not stable to alcohols, alkalis and conc. acids

Technical specification
- **Material:** PA 6 (polyamide 6)
- **Density:** 1.13 g/cm^3
- **Temperature range:** -40 to +100 °C, for a short time +160 °C
- **Dielectric constant:** 3.6 at 1 MHz
- **Dielectric strength:** 2.7 kV/mm
- **Surface resistivity:** 5 x 10^{10} Ohm/cm^2
- **Permeability:**
  for carbon-dioxide: 2 x 10^{-9} cm^2 x s^{-1}/cm Hg
  for oxygen: 6 x 10^{-12} cm^2 x s^{-1}/cm Hg
- **Water absorption:** 2.7 % in 24 h





Item	Thickness mm	Weight g	Dimensions mm	Unit piece	Price EURO
48899	0.05	0.565	100 x 100	5	95.00
48900	0.05	1.3	150 x 150	5	108.00
48901	0.05	5.1	300 x 300	5	141.00
48902	0.05	20.3	600 x 600	5	149.00
48904	0.25	2.8	100 x 100	5	62.00
48905	0.25	6.4	150 x 150	5	72.00

THOMAFOIL-PA Film (PA 46)

Product specification
- Low UV resistance
- Good resistance to alcohols, aromatic hydrocarbons, fats and oils; not stable to strong acids

Technical specification
- **Material:** PA 46 (polyamide 46)
- **Density:** 1.18 g/cm^3
- **Temperature range:** -40 to +135 °C
- **Dielectric constant:** 3.8 - 4.3 at 1 MHz
- **Surface resistivity:** >10^{12} Ohm/cm^2
- **Water absorption:** 1.3 % in 24 h

Item	Thickness mm	Weight g	Dimensions mm	Unit piece	Price EURO	Price EURO
48897	0.25	3	100 x 100	1	62.00	62.00
48898	0.25	6.7	150 x 150	1	93.00	93.00

THOMAFOIL-PC Film

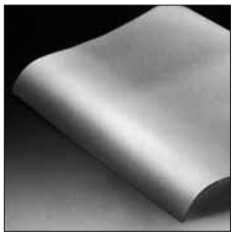
Product specification
- Low UV resistance
- Good resistance to alcohols, fats and oils, diluted acids, not stable to aromatic hydrocarbons, ketones, alkalis, conc. acids

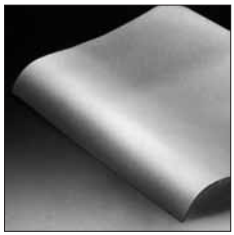
Technical specification
- **Material:** PC (polycarbonate)
- **Density:** 1.2 g/cm^3
- **Temperature range:** -50 to +125 °C
- **Dielectric constant:** 2.9 - 3.1 at 1 MHz
- **Dielectric strength:** 252 kV/mm
- **Permeability:**
  for carbon-dioxide: 6.5 x 10^{-10} cm^2 x s^{-1}/cm Hg
  for oxygen: 1.8 x 10^{-10} cm^2 x s^{-1}/cm Hg
- **Water absorption:** 0.15 - 0.35 % in 24 h

Item	Thickness mm	Weight g	Dimensions mm	Unit piece	Price EURO
48906	0.002	0.054	150 x 150	1	116.00
48907	0.002	0.216	300 x 300	1	136.00
48908	0.02	0.24	100 x 100	1	82.00
48909	0.02	0.54	150 x 150	1	105.00
48910	0.02	2.2	300 x 300	1	202.00

THOMAFOIL-PC Film - metallized

Product specification
- Low UV resistance
- Good resistance to alcohols, fats and oils, diluted acids, not stable to aromatic hydrocarbons, ketones, alkalis, conc. acids





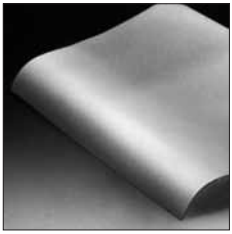
Technical specification
- **Material:** PC (polycarbonate), Al-metallized
- **Density:** 1.2 g/cm^3
- **Temperature range:** -50 to +125 °C
- **Surface resistivity:** 10^2 Ohm/cm^2

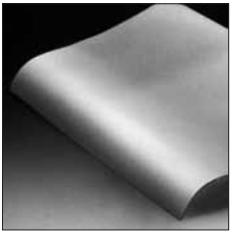
Item	Thickness mm	Weight g	Dimensions mm	Unit piece	Price EURO
48911	0.002	0.027	100 x 100	1	181.00
48912	0.002	0.065	150 x 160	1	200.00
48913	0.002	0.13	160 x 300	1	223.00

THOMAFOIL-PE Film - graphite-filled

Product specification
- Good UV resistance
- Good resistance to alcohols, diluted acids, unstable to conc. acids, ketones, aromatic hydrocarbons

Technical specification
- **Material:** PE (polyethylene) with graphite fill, electrically conductive
- **Density:** 0.96 g/cm^3
- **Surface resistivity:** 10^3 - 10^4 Ohm/cm^2
- **Volume resistivity:** <10^5 Ohm/cm^3





Item	Thickness mm	Weight g	Dimensions mm	Unit piece	Price EURO
48942	0.08	0.768	100 x 100	1	36.00
48943	0.08	1.7	150 x 150	1	44.00
48944	0.08	6.9	300 x 300	1	64.00
48945	0.08	19.2	500 x 500	1	105.00

THOMAFOIL-PEEK Film

Product specification
- Moderate UV resistance
- Good resistance to alcohols, aromatic hydrocarbons, halogenes, ketones, fats and oils, alkalis and acids; not stable to oxydizing acids

Technical specification
- **Material:** PEEK (polyether-etherketone)
- **Temperature range:** -50 to +250 °C
- **Density:** 1.32 g/cm^3
- **Dielectric strength:** 110 kV/mm
- **Permeability for oxygen:** 1.1 x 10^{-11} cm^2 x s^{-1}/cm Hg
- **Water absorption:** 0.1 - 0.3 % in 24 h

Item	Thickness mm	Weight g	Dimensions mm	Unit piece	Price EURO
48920	0.025	0.726	150 x 150	1	70.00
48921	0.025	2.9	300 x 300	1	105.00
48924	0.075	0.968	100 x 100	1	67.00
48926	0.075	8.7	300 x 300	1	133.00
48925	0.075	2.2	150 x 150	1	82.00
48930	0.1	1.3	100 x 100	1	59.00
48931	0.1	2.8	150 x 150	1	72.00
48932	0.1	9.5	300 x 300	1	108.00
48927	0.25	3.2	100 x 100	1	82.00
48928	0.25	7.3	150 x 150	1	110.00
48929	0.25	24.7	300 x 300	1	292.00

THOMAFOIL-PES Film

Product specification
- Moderate UV resistance
- Good resistance to alcohols, halogenes, fats and oils, acids, alkalis, not stable to conc. acids, ketones, aromatic hydrocarbons

Technical specification
- **Material:** PES (polyether-sulfone)
- **Colour:** amber
- **Density:** 1.37 g/cm^3
- **Temperature range:** -100 to +190 °C, for a short time +220 °C
- **Dielectric strength:** 232 kV/mm
- **Permeability:**
  for carbon-dioxide: 2.4 x 10^{-10} cm^2 x s^{-1}/cm Hg
  for oxygen: 5.4 x 10^{-11} cm^2 x s^{-1}/cm Hg
- **Water absorption:** 0.4 - 2.0 % in 24 h

Item	Thickness mm	Weight g	Dimensions mm	Unit piece	Price EURO
48939	0.25	3.4	100 x 100	1	112.00
48940	0.25	7.7	150 x 150	1	158.00
48941	0.25	30.8	300 x 300	1	261.00

THOMAFOIL-PETP Film

Product specification
- Heavy duty film
- Very low creeping tendency
- Very good dimensional stability
- Very wear-resistant, not resistant to hydrolysis
- Good temperature resistance
- Good resistance to UV-radiation and weather
- Good mechanical stability, best stiffness and hardness
- Good coefficient of sliding friction
- Good abrasion resistance
- Self-extinguishing
- Unstable to halogenated solutions as well as conc. alkalis and mineral acids
- Sensitive to steam and hot water
- Hazard indication: PETP is physiologically safe, but particles of this extremely thin film adhere to the skin and can cause irritations. Therefore, inhaling of film particles has absolutely to be avoided. The eyes have to be protected while working with the film.

Technical specification
- **Material:** PETP (polyethylene-terephthalate)
- **Design:** C-type film
- **Density:** 1.39 g/cm^3 (DIN 53479)
- **Temperature range:** -20 to +110 °C, for a short time +160 °C
- **Dielectric strength:** ≈60 kV/mm

Item	Thickness mm	Dimensions mm	Width mm	Length m	Unit piece	Price EURO
18542	0.005	150 x 150			1	151.00
18543	0.005	300 x 300			1	266.00
18552	0.023	100 x 150			1	139.00
18544	0.008		152	1	1	202.00
18545	0.008		152	5	1	284.00
18546	0.008		152	20	1	504.00
18547	0.008		152	100	1	1,562.00
18548	0.012		152	1	1	156.00
18549	0.012		152	5	1	254.00
18550	0.012		152	20	1	356.00
18551	0.012		152	100	1	1,176.00
18553	0.023		152	1	1	202.00
18554	0.023		152	5	1	289.00
18555	0.023		152	20	1	422.00
18556	0.023		152	100	1	990.00

THOMAFOIL-PI Film

Product specification
- Good UV resistance
- Good beta and gamma radiation resistance
- Good resistance to alcohols, aromatic hydrocarbons, halogenes, ketones, fats and oils, conc. acids; not stable to alkalis

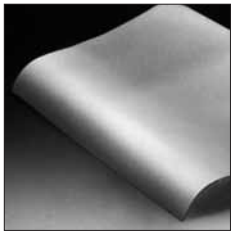
Technical specification
- **Material:** PI (polyimide)
- **Temperature range:** -270 to +250 °C, for a short time +320 °C
- **Density:** 1.42 g/cm^3
- **Dielectric strength:** 280 kV/mm
- **Permeability:**
  for carbon-dioxide: 2.7 x 10^{-11} cm^2 x s^{-1}/cm Hg
  for oxygen: 1.5 x 10^{-11} cm^2 x s^{-1}/cm Hg
- **Water absorption:** 0.2 - 2.9 % in 24 h

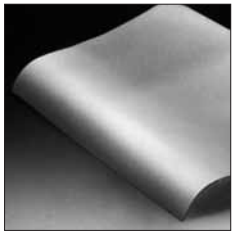
Item	Thickness mm	Weight g	Dimensions mm	Unit piece	Price EURO
48955	0.008	0.114	100 x 100	1	110.00
48956	0.008	0.256	150 x 150	1	315.00
48957	0.008	1.02	300 x 300	1	484.00
48958	0.05	0.71	100 x 100	1	70.00
48959	0.05	1.6	150 x 150	1	93.00
48960	0.05	6.4	300 x 300	1	238.00
48961	0.125	1.8	100 x 100	1	77.00
48962	0.125	4	150 x 150	1	90.00
48963	0.125	16	300 x 300	1	162.00

THOMAFOIL-PP Film

Product specification
- Moderate UV resistance
- Good resistance to alcohols, ketones, conc. acids, alkalis, not stable to aromatic hydrocarbons, fats and oils, halogenes

Technical specification
- **Material:** PP (polypropylene)
- **Density:** 0.9 g/cm^3
- **Temperature range:** -60 to +100 °C, for a short time +120 °C
- **Water absorption:** <0.05 % in 24 h
- **Dielectric constant:** 2.2 - 2.6 at 1 MHz
- **Surface resistivity:** 10^{13} Ohm/cm^2





Item	Thickness mm	Weight g	Dimensions mm	Unit piece	Price EURO
48968	0.004	0.036	100 x 100	1	106.00
48969	0.004	0.815	150 x 150	1	118.00
48970	0.004	0.326	300 x 300	1	152.00
48971	0.01	0.09	100 x 100	1	72.00
48972	0.01	0.204	150 x 150	1	84.00
48973	0.01	0.815	300 x 300	1	92.00
48974	0.04	0.36	100 x 100	1	70.00
48975	0.04	0.8	150 x 150	1	72.00
48976	0.04	3.24	300 x 300	1	82.00
48977	0.04	12.9	600 x 600	1	124.00

THOMAFOIL-PTFE Film

Product specification
- Good UV resistance
- Good resistance to greases and oils, alcohols, halogenes, aromatic hydrocarbons, ketones, alkalis, acids

Technical specification
- **Material:** PTFE (polytetrafluoroethylene)
- **Temperature range:** -260 to +260 °C
- **Density:** 2.2 g/cm^3
- **Dielectric constant:** 2.1 at 1 MHz
- **Water absorption:** 0.1 % after 24 h

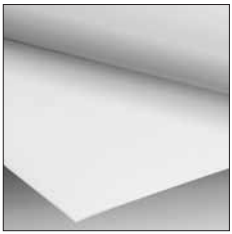
Item	Thickness mm	Weight g	Dimensions mm	Unit piece	Price EURO
49000	0.01	0.218	100 x 100	1	64.00
49001	0.01	0.49	150 x 150	1	82.00
49002	0.01	2	300 x 300	1	123.00
49003	0.05	1.1	100 x 100	1	34.00
49004	0.05	2.5	150 x 150	1	47.00
49005	0.05	9.8	300 x 300	1	70.00
49006	0.1	2.2	100 x 100	1	41.00
49007	0.1	4.9	150 x 150	1	52.00
49008	0.1	19.6	300 x 300	1	70.00

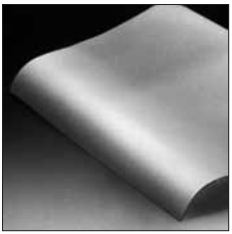
THOMAPLAST®-PTFE Film (virgin)

Product specification
- Excellent resistance to weather and UV radiation
- Sliced from pressure / high-temperature sintered PTFE powder
- Good mechanical properties from low to high temperature range
- Lowest surface friction value of all solids
- Outstanding sliding properties, highest chemical resistance
- Antiadhesive and not wettable
- Low permeability, silencing and vibration-damping
- Good dielectric strength

Technical specification

- **Material:** virgin PTFE (polytetrafluoroethylene)
- **Colour:** opal white
- **Temperature range:** -260 to +260 °C
- **Shore hardness D:** 54° (DIN 53505)
- **Specific weight:** 2.17 (DIN 53479)
- **Tearing strength:** 28.5 N/mm² (DIN 53455)
- **Elongation at break:** 300 % (DIN 53455)
- **Ball pressure strength:** 22.6 N/mm² (DIN 53456)
- **Dielectric strength:** 50 kV/mm (DIN 53481)





Item	Thickness mm	Width mm	Length m	Unit piece	Price EURO
18097	0.1	600	1	1	54.00
18098	0.1	600	3	1	136.00
18099	0.1	600	5	1	192.00
18100	0.1	600	10	1	310.00
18102	0.1	600	20	1	476.00
18108	0.25	600	1	1	95.00
18109	0.25	600	3	1	233.00
18110	0.25	600	5	1	300.00
18111	0.25	600	10	1	479.00
18113	0.25	600	20	1	714.00
18119	0.5	600	1	1	182.00
18120	0.5	600	3	1	430.00
18121	0.5	600	5	1	540.00
18122	0.5	600	10	1	834.00
18124	0.5	600	20	1	1,292.00
18130	1	600	1	1	310.00
18131	1	600	3	1	785.00
18132	1	600	5	1	952.00
18133	1	600	10	1	1,427.00
18135	1	600	20	1	1,903.00
18141	2	600	1	1	476.00
18142	2	600	3	1	1,143.00
18143	2	600	5	1	1,427.00
18144	2	600	10	1	1,903.00
18146	2	600	20	1	2,854.00
18152	0.1	1,200	1	1	95.00
18153	0.1	1,200	3	1	208.00
18154	0.1	1,200	5	1	305.00
18155	0.1	1,200	10	1	522.00
18157	0.1	1,200	20	1	783.00
18163	0.25	1,200	1	1	151.00
18164	0.25	1,200	3	1	356.00
18165	0.25	1,200	5	1	430.00
18166	0.25	1,200	10	1	645.00
18168	0.25	1,200	20	1	859.00
18174	0.5	1,200	1	1	302.00
18175	0.5	1,200	3	1	714.00
18176	0.5	1,200	5	1	865.00
18177	0.5	1,200	10	1	1,297.00
18179	0.5	1,200	20	1	1,729.00
18185	1	1,200	1	1	433.00
18186	1	1,200	3	1	1,038.00
18187	1	1,200	5	1	1,297.00
18188	1	1,200	10	1	1,729.00
18190	1	1,200	20	1	2,593.00
18196	2	1,200	1	1	780.00
18197	2	1,200	3	1	1,816.00
18198	2	1,200	5	1	2,161.00
18199	2	1,200	10	1	3,457.00

THOMAPLAST®-High-Tech PTFE Film (virgin) - conforming to FDA

Application area

- As table pad, for lining drawers, as slideway or for insulation.

Product specification

- PTFE sheets in practice-oriented thicknesses of 0.05 mm and 1.5 mm; length 1,000 mm each, width 300 or 600 mm. Electrically non-conductive, non-porous smooth surface, water-repellent, chemical-resistant, free of leachable components, biocompatible; temperature-resistant, sterilizable with all commonly used methods.

Technical specification

- **Material:** virgin PTFE (polytetrafluoroethylene)
- **Colour:** opal white
- **Temperature range:** -200 to +260 °C
- **Shore hardness D:** 54° (DIN 53465)

Item	Thickness mm	Dimensions mm	Unit piece	Price EURO
47948	0.05	300 x 1,000	1	29.00
47949	0.12	300 x 1,000	1	33.00
47950	0.25	300 x 1,000	1	52.00
47951	0.5	300 x 1,000	1	78.00
47952	0.75	300 x 1,000	1	118.00
47953	1	300 x 1,000	1	138.00
47954	1.5	300 x 1,000	1	178.00
47955	0.05	600 x 1,000	1	47.00
47956	0.12	600 x 1,000	1	51.00
47957	0.25	600 x 1,000	1	78.00
47958	0.5	600 x 1,000	1	126.00
47959	0.75	600 x 1,000	1	180.00

Item	Thickness mm	Dimensions mm	Unit piece	Price EURO
47960	1	600 x 1,000	1	229.00
47961	1.5	600 x 1,000	1	262.00

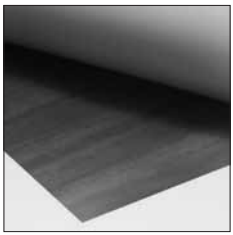
THOMAPLAST®-PTFE Film (virgin) - etched on one side

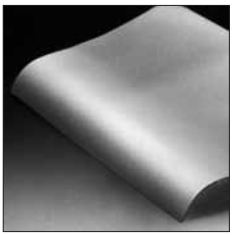
Product specification

- Excellent resistance to weather and UV radiation
- Sliced from pressure / high-temperature sintered PTFE powder
- One side etched, the other side left unchanged
- Etched side bondable and suitable for lamination
- Good mechanical properties from low to high temperature range
- Lowest surface friction value of all solids on the unchanged side
- Outstanding sliding properties of the unchanged side
- Highest chemical resistance
- Unchanged side antiadhesive and not wettable
- Low permeability
- Silencing and vibration-damping
- Good dielectric strength
- Width optionally 600 or 1,200 mm
- Thickness optionally 0.1 mm, 0.25 mm, 0.5 mm, 1.0 mm or 2.0 mm

Technical specification

- **Material:** virgin PTFE (polytetrafluoroethylene)
- **Colour:**
  unchanged side: light grey
  etched side: russet (etched with ammonia-sodium)
- **Temperature range:** -260 to +260 °C
- **Shore hardness D:** 54° (DIN 53465)
- **Specific weight:** 2.17 (DIN 53479)
- **Tearing strength:** 28.5 N/mm^2 (DIN 53455)
- **Elongation at break:** 300 % (DIN 53455)
- **Ball pressure strength:** 22.6 N/mm^2 (DIN 53456)
- **Dielectric strength:** 50 kV/mm (DIN 53481)
- **Design:** etched on one side





Item	Thickness mm	Width mm	Length m	Unit piece	Price EURO
18207	0.1	600	1	1	62.00
18208	0.1	600	3	1	156.00
18209	0.1	600	5	1	223.00
18210	0.1	600	10	1	310.00
18212	0.1	600	20	1	555.00
18218	0.25	600	1	1	136.00
18219	0.25	600	3	1	335.00
18220	0.25	600	5	1	427.00
18221	0.25	600	10	1	686.00
18223	0.25	600	20	1	1,028.00
18229	0.5	600	1	1	223.00
18230	0.5	600	3	1	565.00
18231	0.5	600	5	1	683.00
18232	0.5	600	10	1	1,031.00
18234	0.5	600	20	1	1,368.00
18240	1	600	1	1	341.00
18241	1	600	3	1	821.00
18242	1	600	5	1	1,026.00
18243	1	600	10	1	1,368.00
18245	1	600	20	1	2,051.00
18251	2	600	1	1	555.00
18252	2	600	3	1	1,230.00
18253	2	600	5	1	1,496.00
18254	2	600	10	1	2,056.00
18256	2	600	20	1	4,081.00
18262	0.1	1,200	1	1	113.00
18263	0.1	1,200	3	1	264.00
18264	0.1	1,200	5	1	376.00
18265	0.1	1,200	10	1	499.00
18267	0.1	1,200	20	1	872.00
18273	0.25	1,200	1	1	187.00
18274	0.25	1,200	3	1	466.00
18275	0.25	1,200	5	1	622.00
18276	0.25	1,200	10	1	934.00
18278	0.25	1,200	20	1	1,248.00
18284	0.5	1,200	1	1	312.00
18285	0.5	1,200	3	1	750.00
18286	0.5	1,200	5	1	931.00
18287	0.5	1,200	10	1	1,248.00
18289	0.5	1,200	20	1	1,872.00
18295	1	1,200	1	1	499.00
18296	1	1,200	3	1	1,118.00
18297	1	1,200	5	1	1,366.00
18298	1	1,200	10	1	1,856.00
18300	1	1,200	20	1	3,712.00
18306	2	1,200	1	1	747.00
18307	2	1,200	3	1	1,678.00
18308	2	1,200	5	1	2,485.00
18309	2	1,200	10	1	3,728.00
18311	2	1,200	20	1	6,213.00

THOMAPLAST®-PTFE Film (virgin) - etched on one side, square

Product specification

- Handling hint: For direct bonding with other materials; no need for pretreatment (etching) of the sheet with active sodium solution.

Technical specification

- **Material:** virgin PTFE (polytetrafluoroethylene)
- **Colour:**
  unchanged side: light grey
  etched side: russet
- **Temperature range:** -260 to +260 °C
- **Shore hardness D:** 54° (DIN 53465)
- **Design:** etched on one side

Item	Thickness mm	Dimensions mm	Unit piece	Price EURO
300160	0.1	600 x 600	1	75.00
300161	0.2	600 x 600	1	79.00
300162	0.5	600 x 600	1	106.00
300163	1	600 x 600	1	170.00
300164	1.5	600 x 600	1	219.00
300165	2	600 x 600	1	273.00
300166	2.5	600 x 600	1	294.00
300167	3	600 x 600	1	313.00
300168	0.5	1,200 x 1,200	1	298.00
300169	1	1,200 x 1,200	1	467.00
300170	1.5	1,000 x 1,000	1	701.00
300171	2	1,000 x 1,000	1	833.00
300172	2.5	1,200 x 1,200	1	1,022.00
300173	3	1,200 x 1,200	1	1,039.00

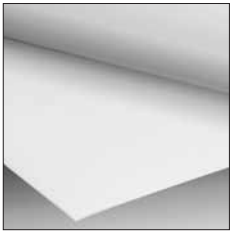
THOMAPLAST®-PTFE Film (virgin) - self-adhesive on one side

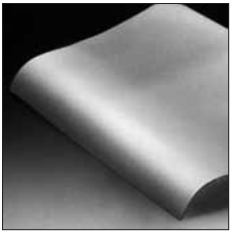
Product specification

- Made of sliced PTFE and coated with silicone adhesive
- Excellent electrical properties
- Strongly anti-adhesive surface
- Good chemical resistance
- High abrasion resistance
- Low friction, outstanding resistance to heat
- Outstanding matching to uneven surfaces
- Physical-chemical properties:
  Due to its physical-chemical properties outstandingly suitable for lining of containers and conveying systems in the areas of chemistry, mechanical engineering and vehicle building. Very well suited for curved surfaces occurring for instance in mould making. Due to special antiadhesive properties easy mould release with sticky materials such as PUR, epoxy, and phenolic resin.

Technical specification

- **Material:** PTFE (polytetrafluoroethylene)
- **Colour:** grey
- **Adhesive:** silicone (covered with corrugated yellow liner)
- **Adhesive layer:** approx. 0.045 mm
- **Max. temperature:** +150 °C
- **Elongation at break:** at least 270 %, with thickness >0.25 mm up to 300 %





Item	Width mm	Thick-ness mm	Tensile strength N/cm	Adhesive strength[1] N/cm	Length m	Price EURO
17844	500	0.13	53	5.6	1	79.00
17845	500	0.13	53	5.6	3	213.00
17846	500	0.13	53	5.6	5	276.00
17847	500	0.13	53	5.6	10	442.00
17849[2]	500	0.13	53	5.6	20	694.00
17860	500	0.25	96	5.9	1	125.00
17861	500	0.25	96	5.9	3	338.00
17862	500	0.25	96	5.9	5	438.00
17863	500	0.25	96	5.9	10	701.00
17865[2]	500	0.25	96	5.9	20	1,102.00
17868	500	0.5	184	6.8	1	206.00
17869	500	0.5	184	6.8	3	555.00
17870	500	0.5	184	6.8	5	720.00
17871	500	0.5	184	6.8	10	1,151.00
17873[2]	500	0.5	184	6.8	20	1,808.00
17876	1,000	0.13	53	5.6	1	158.00
17877	1,000	0.13	53	5.6	3	426.00
17878	1,000	0.13	53	5.6	5	552.00
17879	1,000	0.13	53	5.6	10	883.00
17881[2]	1,000	0.13	53	5.6	20	1,387.00
17892	1,000	0.25	96	5.9	1	251.00
17893	1,000	0.25	96	5.9	3	676.00
17894	1,000	0.25	96	5.9	5	877.00
17895	1,000	0.25	96	5.9	10	1,402.00
17897[2]	1,000	0.25	96	5.9	20	2,203.00
17900	1,000	0.5	184	6.8	1	411.00
17901	1,000	0.5	184	6.8	3	1,110.00
17902	1,000	0.5	184	6.8	5	1,439.00
17903	1,000	0.5	184	6.8	10	2,302.00
17905[2]	1,000	0.5	184	6.8	20	3,616.00

[1] at 90° peel resistance [2] Delivered in 2 reels of 10 meter

THOMAFOIL-PVDF Film

Product specification

- Excellent UV resistance
- Good beta and gamma radiation resistance
- Good resistance to alcohols, fats and oils, halogenes, alkalis, acids; not stable to ketones, aromatic hydrocarbons

Technical specification

- **Material:** PVDF (polyvinylidene fluoride), piezoelectric
- **Temperature range:** -40 to +160 °C, for a short time +220 °C
- **Density:** 1.76 g/cm^3
- **Dielectric strength:** 150 kV/mm
- **Dielectric constant:** 8.4 at 1 MHz
- **Piezocoefficients:** d31 biaxial 50 pC x N^{-1}; d32 uniaxial 18; biaxial 8 pC x N^{-1}; 33 uniaxial 2; biaxial 8 pC x N^{-1}

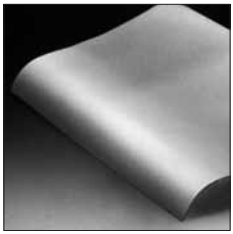
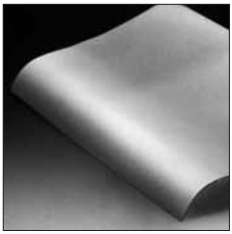
Item	Thickness mm	Weight g	Dimensions mm	Unit piece	Price EURO
48978	0.009	0.01	25 x 25	1	151.00
48979	0.009	0.04	50 x 50	1	284.00
48980	0.009	0.158	100 x 100	1	435.00
48981	0.028	0.028	50 x 50	1	128.00
48982	0.028	0.11	100 x 100	1	318.00
48983	0.028	0.44	200 x 200	1	445.00
48984	0.5	8.8	100 x 100	1	113.00
48985	0.5	19.8	150 x 150	1	121.00

Item	Thickness mm	Weight g	Dimensions mm	Unit piece	Price EURO
48986	0.5	72.5	300 x 300	1	351.00
48987	0.5	220	600 x 600	1	719.00

THOMAFOIL-PVDF Film - metallized

Product specification
- Excellent UV resistance
- Good beta and gamma radiation resistance
- Good resistance to alcohols, fats and oils, halogenes, alkalis, acids; not stable to ketones, aromatic hydrocarbons

Technical specification
- **Material:** PVDF (polyvinylidene fluoride), Al-metallized on both sides, piezoelectric
- **Temperature range:** -40 to +160 °C, for a short time +220 °C
- **Density:** 1.76 g/cm^3
- **Dielectric constant:** 8.4 at 1 MHz
- **Piezocoefficients:** d31 biaxial 50 pC x N^{-1}; d32 uniaxial 18; biaxial 8 pC x N^{-1}; d33 uniaxial 2; biaxial 8 pC x N^{-1}
- **Surface resistivity:** 10^2 Ohm/cm^2

Item	Thickness mm	Weight g	Dimensions mm	Unit piece	Price EURO
48991	0.025	0.11	50 x 50	1	462.00
48992	0.025	0.441	100 x 100	1	784.00
48993	0.025	0.993	150 x 150	1	1,589.00

THOMAFOIL-TPX Film

Product specification
- Moderate UV resistance
- Good resistance to alcohols, halogens, fats and oils, ketones, conc. acids, alkalis

Technical specification
- **Material:** TPX (polymethylpentene)
- **Density:** 0.835 g/cm^3
- **Temperature range:** 0 to +115 °C
- **Water absorption:** 0.1 % in 24 h

Item	Thickness mm	Weight g	Dimensions mm	Unit piece	Price EURO
48966	0.5	9.4	150 x 150	1	100.00
48967	0.5	37.6	300 x 300	1	192.00

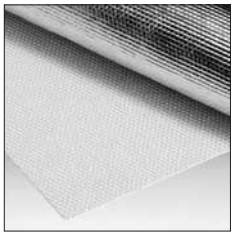
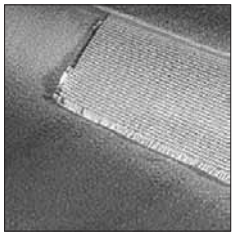
Glass Fabric

THOMAPLAST®-Glass Fabric Film - aluminium-coated

Application area
- Thermal insulating, heat shielding function

Product specification
- Aluminium-coated on one side
- Resistant to oils, fats, solvent and organic acids

Technical specification
- **Material:** glass fibre, made of EC 9 filament yarn, textured
- **Temperature range:** -10 to +450 °C, for a short time +550 °C
- **Weight:** approx. 1.07 kg/m^2

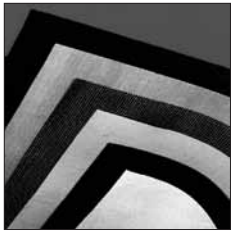
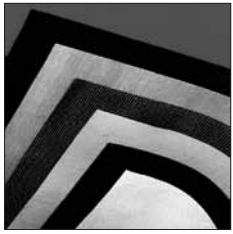



Item	Thickness mm	Dimensions mm	Unit piece	Price EURO
302295	1.6	500 x 500	1	94.00
302296	1.6	1,000 x 1,000	1	200.00

THOMAPLAST®-Glass Fabric Film - silicone-coated

Application area
- Insulation of solenoids
- Layer insulation in motor and transformer production
- Insulating foil in chemical engineering, laboratory technology, electrical engineering and machine building

Product specification
- High diagonal flexibility and lower elongation in machine direction, thus wide application spectrum.
- Very close meshed and extremely fine yarn structure.
- Coated with silicone rubber under pressure on both sides, so that the silicone permeates the meshes of the fabric thus ensuring a strong bonding.
- Wide temperature spectrum in the positive and negative range
- Remarkable tearing strength
- Easy to cut
- Very good adhesive repellent properties

Technical specification

- **Material:** glass silk, silicone-coated
- **Colour:** yellow
- **Temperature range:** -60 to +200 °C
- **Thermal class:** H (+180 °C)
- **Water absorption after 24 h water bath:** 1.0 - 3.8 %
- **Specific weight:** 1.3 - 1.6
- **Dielectric strength:** 14 - 40 kV/mm at +20 °C
  17 - 43 kV/mm at +180 °C
- **Volume resistivity:** 10^{13} Ohm cm at +20 to +180 °C
- **Dielectric constant:** 4.5 - 4.9 at 800 Hz / +20 °C
  3.9 - 4.3 at 800 Hz / +180 °C
- **Loss factor:** 0.013 - 0.025 at 800 Hz / +20 °C
  0.010 - 0.018 at 800 Hz / +180 °C
- **Tearing strength:** 40 - 120 N/cm² (depending on thickness)

Item	Thickness mm	Dimensions mm	Unit piece	Price EURO
331686	0.125	500 x 500	1	82.00
331687	0.125	500 x 1,000	1	126.00
331688	0.125	1,000 x 1,000	1	212.00
331689	0.15	500 x 500	1	110.00
331690	0.15	500 x 1,000	1	184.00
331691	0.15	1,000 x 1,000	1	292.00
331692	0.254	500 x 500	1	144.00
331693	0.254	500 x 1,000	1	242.00
331694	0.254	1,000 x 1,000	1	382.00

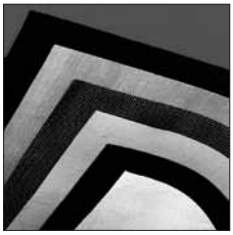
THOMAPLAST®-Glass Fabric Film - PTFE-Bonded

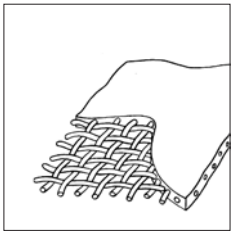
Product specification

- PTFE-bonded rough-cast glass silk fabric
- Outstanding electrical insulating properties
- Outstanding chemical resistance
- High abrasion resistance and durability
- High antiadhesion
- Low friction coefficient
- Outstanding thermal resistance
- Low thermal expansion
- Physiologically safe
- Resistant to weather, UV-radiation, and aging
- Physical-chemical features:
  Combines the chemical material properties of PTFE with the extraordinary strength of highly tension-proof glass cloth.
  Due to its extraordinary electrical insulating and dielectric properties together with excellent mechanical stability, the material is best suited for heavy-duty insulations, aerial covers, and cable sheating.
  Its physiological safety, antiadhesiveness, and temperature resistance make PTFE-bonded glass cloth an ideal processing aid in the food processing and semi-luxuries industry.

Technical specification

- **Material:** PTFE (polytetrafluoroethylene) combined with rough-cast glass silk fabric
- **Colour:** light-beige to medium brown, special quality "antistatic", black
- **Temperature range:** -150 to +260 °C
- **Special features:** high tearing strength, antistatic design with surface resistivity 10^6 Ohm
- **Certification:** permanent quality according to ISO 9001





Item	Width mm	Thick-ness mm	Design	Tensile strength N/cm	Tear resist. N	Length m	Price EURO
17996	500	0.07	smooth	180	13	1	54.00
17997	500	0.07	smooth	180	13	3	116.00
17998	500	0.07	smooth	180	13	5	159.00
17999	500	0.07	smooth	180	13	10	228.00
18001	500	0.07	smooth	180	13	20	325.00
18004	500	0.12	smooth	290	20	1	59.00
18005	500	0.12	smooth	290	20	3	141.00
18006	500	0.12	smooth	290	20	5	195.00
18007	500	0.12	smooth	290	20	10	274.00
18009	500	0.12	smooth	290	20	20	392.00
18012	500	0.14	smooth	310	20	1	70.00
18013	500	0.14	smooth	310	20	3	169.00
18014	500	0.14	smooth	310	20	5	233.00
18015	500	0.14	smooth	310	20	10	328.00
18017	500	0.14	smooth	310	20	20	468.00
18020	500	0.15	antistatic	300	15	1	105.00
18021	500	0.15	antistatic	300	15	3	233.00
18022	500	0.15	antistatic	300	15	5	305.00
18023	500	0.15	antistatic	300	15	10	435.00
18025	500	0.15	antistatic	300	15	20	696.00
18028	500	0.225	smooth	520	40	1	85.00
18029	500	0.225	smooth	520	40	3	197.00
18030	500	0.225	smooth	520	40	5	259.00
18031	500	0.225	smooth	520	40	10	399.00
18033	500	0.225	smooth	520	40	20	655.00
18036	500	0.35	tearing-resistant	660		1	116.00
18037	500	0.35	tearing-resistant	660		3	277.00
18038	500	0.35	tearing-resistant	660		5	356.00
18039	500	0.35	tearing-resistant	660		10	481.00
18041	500	0.35	tearing-resistant	660		20	811.00
18044	1,000	0.07	smooth	180	13	1	77.00
18045	1,000	0.07	smooth	180	13	3	177.00
18046	1,000	0.07	smooth	180	13	5	236.00
18047	1,000	0.07	smooth	180	13	10	353.00
18048	1,000	0.07	smooth	180	13	20	588.00
18051	1,000	0.12	smooth	290	20	1	95.00
18052	1,000	0.12	smooth	290	20	3	215.00
18053	1,000	0.12	smooth	290	20	5	284.00
18054	1,000	0.12	smooth	290	20	10	427.00
18056	1,000	0.12	smooth	290	20	20	711.00

Item	Width mm	Thick-ness mm	Design	Tensile strength N/cm	Tear resist. N	Length m	Price EURO
18059	1,000	0.14	smooth	310	20	1	100.00
18060	1,000	0.14	smooth	310	20	3	243.00
18061	1,000	0.14	smooth	310	20	5	300.00
18062	1,000	0.14	smooth	310	20	10	468.00
18064	1,000	0.14	smooth	310	20	20	849.00
18067	1,000	0.15	antistatic	300	15	1	159.00
18068	1,000	0.15	antistatic	300	15	3	379.00
18069	1,000	0.15	antistatic	300	15	5	476.00
18070	1,000	0.15	antistatic	300	15	10	635.00
18072	1,000	0.15	antistatic	300	15	20	1,049.00
18075	1,000	0.225	smooth	520	40	1	131.00
18076	1,000	0.225	smooth	520	40	3	284.00
18077	1,000	0.225	smooth	520	40	5	356.00
18078	1,000	0.225	smooth	520	40	10	530.00
18080	1,000	0.225	smooth	520	40	20	949.00
18083	1,000	0.35	tearing-resistant	660		1	144.00
18084	1,000	0.35	tearing-resistant	660		3	346.00
18085	1,000	0.35	tearing-resistant	660		5	420.00
18086	1,000	0.35	tearing-resistant	660		10	691.00
18088	1,000	0.35	tearing-resistant	660		20	1,258.00

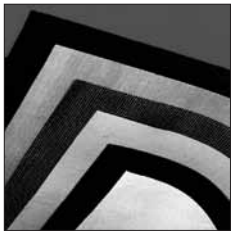
THOMAPLAST®-Glass Fabric Film - PTFE-bonded, self-adhesive at one side

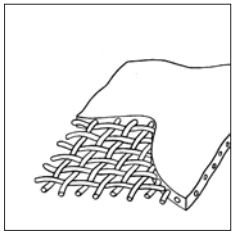
Product specification

- Highly tension-proof glass cloth, bonded with high-temperature-resistant silicone adhesive
- High dielectric strength
- Outstanding chemical resistance
- High abrasion resistance and durability
- High tear resistance, high antiadhesion
- Low friction
- Outstanding thermal resistance
- Outstanding matching to uneven surfaces
- Low cold flow at pressure load
- Permanent dimensional stability
- Physical-chemical features:
  Combines the chemical material properties of PTFE with the extraordinary strength of highly tension-proof glass cloth.
  Due to its high dielectric strength together with excellent mechanical stability, the material is best suited for heavy-duty insulations and cable sheating.
  Outstanding suitability for lining of transport guide rails, chutes, and skids.
  Due to high temperature stability also usable for packers such as heat sealing devices, blister-foil packers, and tubing bag welders.

Technical specification

- **Material:** PTFE (polytetrafluoroethylene) combined with glass cloth compound
- **Colour:** yellow-brown
- **Adhesive layer:** approx. 0.045 mm silicone (covered with wavy yellow liner)
- **Temperature range:** -73 to +200 °C
- **Elongation at break:** 5 %





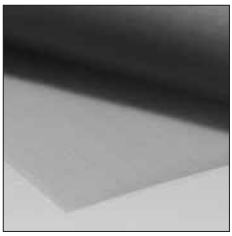
Item	Width mm	Thick-ness mm	Tensile strength N/cm	Adhesive strength N/cm	Length m	Price EURO
17908	500	0.07	180	5.3	1	105.00
17909	500	0.07	180	5.3	3	261.00
17910	500	0.07	180	5.3	5	335.00
17911	500	0.07	180	5.3	10	537.00
17913	500	0.07	180	5.3	20	806.00
17916	500	0.12	290	6.2	1	123.00
17917	500	0.12	290	6.2	3	300.00
17918	500	0.12	290	6.2	5	381.00
17919	500	0.12	290	6.2	10	617.00
17921	500	0.12	290	6.2	20	913.00
17924	500	0.14	310	6.4	1	131.00
17925	500	0.14	310	6.4	3	320.00
17926	500	0.14	310	6.4	5	402.00
17927	500	0.14	310	6.4	10	655.00
17929	500	0.14	310	6.4	20	982.00
17932	500	0.225	520	7.5	1	156.00
17933	500	0.225	520	7.5	3	376.00
17934	500	0.225	520	7.5	5	468.00
17935	500	0.225	520	7.5	10	729.00
17937	500	0.225	520	7.5	20	1,041.00
17940	1,000	0.07	180	5.3	1	172.00
17941	1,000	0.07	180	5.3	3	402.00
17942	1,000	0.07	180	5.3	5	484.00
17943	1,000	0.07	180	5.3	10	732.00
17945	1,000	0.07	180	5.3	20	975.00
17948	1,000	0.12	290	6.2	1	195.00
17949	1,000	0.12	290	6.2	3	440.00
17950	1,000	0.12	290	6.2	5	525.00
17951	1,000	0.12	290	6.2	10	770.00
17953	1,000	0.12	290	6.2	20	1,256.00
17956	1,000	0.135	290	6.4	1	202.00
17957	1,000	0.135	290	6.4	3	466.00
17958	1,000	0.135	290	6.4	5	555.00
17959	1,000	0.135	290	6.4	10	816.00
17961	1,000	0.135	290	6.4	20	1,335.00
17964	1,000	0.225	520	7.5	1	228.00
17965	1,000	0.225	520	7.5	3	509.00
17966	1,000	0.225	520	7.5	5	617.00
17967	1,000	0.225	520	7.5	10	852.00
17969	1,000	0.225	520	7.5	20	1,442.00

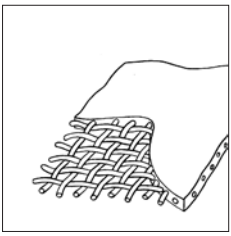
THOMAPLAST®-High-Tech Glass Fabric Film - PTFE Bonded, self-adhesive, cutting

Application area
- Self-adhesive, antiadhesive finish on foil welding devices, drying and coating cylinders, and drum dryers.
- Slip coating at chutes, funnels, guides, slide pipes at packaging machines.
- Self-adhesive insulation foil for electrical engineering, chemical and process engineering.

Product specification
- Extremely antiadhesive surface
- Minimal coefficient of sliding friction
- Extremely high temperature resistance
- Extraordinary chemical resistance
- High tensile strength and dimensional stability
- Low thermal expansion
- Good dielectric properties
- Transmissive for microwaves and UV-light
- Non-toxic
- Resistant to mildew, bacteria, and mould

Technical specification
- **Material:** PTFE (polytetrafluoroethylene)
- **Colour:** brown
- **Design:** PTFE-impregnated glass fabric, self-adhesive
- **Adhesive:** silicone adhesive, adhesive layer covered with removable PVC-film
- **Adhesive layer:** approx. 0.05 mm
- **Temperature range:** -73 to +260 °C
- **Type:**
  AP: Standard design. Colour brown. Cloth with surface finish suitable for most applications; good material combination of mechanical and antiadhesive properties.
  AAP: Cloth with especially high PTFE content and particularly smooth surface. Colour brown.





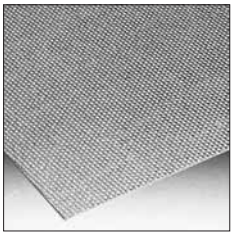
Item	Thickness mm	Type	Dimensions mm	Unit piece	Price EURO
301230	0.073	AP	250 x 250	1	62.00
301231	0.073	AP	250 x 500	1	93.00
301232	0.073	AP	500 x 500	1	144.00
301236	0.122	AP	250 x 250	1	70.00
301237	0.122	AP	250 x 500	1	90.00
301238	0.122	AP	500 x 500	1	154.00
301239	0.152	AAP	250 x 250	1	75.00
301240	0.152	AAP	250 x 500	1	98.00
301241	0.152	AAP	500 x 500	1	162.00
301242	0.235	AP	250 x 250	1	108.00
301243	0.235	AP	250 x 500	1	141.00
301244	0.235	AP	500 x 500	1	208.00

THOMAPLAST®-High-Therm-Glass Fibre Fabric - asbestos-free

Application area
- Thermal insulating

Product specification
- Highest heat stability
- Very high mechanical stability
- Non-combustible
- Good chemical resistance, very high to oils, fats, alkalis, organic acids and vapors

Technical specification
- **Material:** glass fibre, made of EC 9 filament yarn, textured
- **Special features:** asbestos-free
- **Temperature range:** -10 to +450 °C, for a short time +550 °C



Item	Thickness mm	Dimensions mm	Unit piece	Price EURO
302265	2	500 x 500	1	66.00
302266	2	1,000 x 1,000	1	143.00

Metals

THOMAFOIL-Aluminum Foil

Product specification
- Absolutely gas- and steam-tight, physiologically safe, no restoring effect, adapting to all shapes, e.g. for closing of test tubes etc.
- For better heat insulation/heat distribution
- As separation layer between insulation and heating
- As separation layer for heating of plastic pipes

Technical specification
- **Material:** aluminum
- **Max. temperature:** +450 °C

Item	Thickness mm	Width mm	Length m	Unit piece	Price EURO
301652	0.05	150	0.5	1	8.00
301653	0.05	150	1	1	12.00
301654	0.05	150	3	1	23.00
301655	0.05	150	5	1	32.00
70051	0.05	150	25	1	95.00
301656	0.05	500	5	1	45.00
70052	0.05	500	25	1	172.00
70053	0.05	500	50	1	298.00
301657	0.05	1,000	1	1	35.00
301658	0.05	1,000	3	1	78.00
301659	0.05	1,000	5	1	105.00
70054	0.05	1,000	10	1	135.00

THOMAFOIL-Aluminum Foil - calibrated

Product specification
- Calibrated precision foil made of pure aluminum

Technical specification
- **Al-content:** 99.0 %
- **Type analysis in ppm:** Cu <1,000, Fe <7,000, Mn <1,000, Si <5,000, Zn <1,000
- **Tolerance:** ±30 %

Item	Thickness mm	Weight g	Dimensions mm	Unit piece	Price EURO
48313	0.001	0.04	140 x 140	25	275.00

THOMAFOIL-Aluminum Foil - medium hard

Product specification
- Precision foil made of pure aluminum, medium hard

Technical specification
- **Al-content:** 99.0 %
- **Type analysis in ppm:** Cu <500, Fe + Si <10,000, Mn <500, Zn <1,000, Ti <500, others <1,500

Item	Thickness mm	Weight g	Dimensions mm	Unit piece	Price EURO
48335	0.125	7.549	150 x 150	1	36.00
48336	0.125	30.38	300 x 300	1	57.00

THOMAFOIL-Aluminum Foil - round

Technical specification
- **Material:** aluminum
- **Max. temperature:** +450 °C

Item	Outside Ø mm	Thickness mm	Unit piece	Price EURO
70058	100	0.05	100	70.00
70060	150	0.05	100	110.00

THOMAFOIL-Stainless Steel Foil

Product specification
- For better heat distribution/heat insulation
- As separation layer between insulation and heating
- As separation layer for heating of plastic pipes

Technical specification
- **Material:** stainless steel 1.4301
- **Max. temperature:** +800 °C

Item	Thickness mm	Dimensions mm	Unit piece	Price EURO
301645	0.05	150 x 500	1	57.00
301646	0.05	150 x 1,000	1	85.00
301647	0.05	150 x 3.000	1	172.00
301648	0.05	150 x 5.000	1	228.00
301649	0.05	500 x 500	1	68.00
301650	0.05	500 x 1,000	1	136.00
301651	0.05	500 x 3.000	1	286.00

THOMAFOIL-Iron Foil

Product specification
- Precision foil made of pure iron, hard or annealed

Technical specification
- **Fe-content:** 99.5 %
- **Type analysis in ppm:** C 1,200, Mn 5,000, S 500, P 500

Item	Thickness mm	Weight g	Design	Dimensions mm	Price EURO
48486	0.05	3.935	hard	100 x 100	36.00
48487	0.05	8.85	hard	150 x 150	80.00
48488	0.05	35.42	hard	300 x 300	130.00
48492	0.25	19.68	annealed	100 x 100	47.00
48493	0.25	44.3	annealed	150 x 150	67.00
48494	0.25	177.1	annealed	300 x 300	90.00

THOMAFOIL-Graphite Foil

Product specification
- Foil made of purest carbon (graphite)

Technical specification
- **C-content:** 99.95 %
- **Type analysis in ppm:** Al 5, Ba 1, Ca 50, Co <5, Cr <5, Cu <5, Fe 5, Ni 50, Si <5, Ti 30, V 100, Zr <20

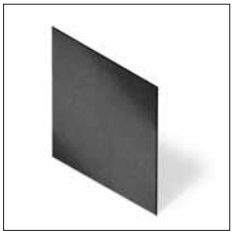
Item	Thickness mm	Weight g	Dimensions mm	Unit piece	Price EURO
49019	0.125	0.143	25 x 25	1	64.00
49020	0.125	0.572	50 x 50	1	105.00
49021	0.125	2.3	50 x 100	1	225.00

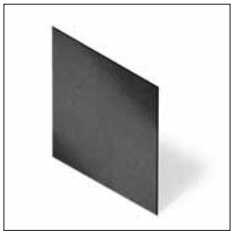
THOMAFOIL-High-Tech-Graphite Foil - high-thermal conductivity

Application area
- CPU modules, DC/DC converters, power modules, power units in automotive applications, active components in notebooks, telecommunication modules

Product specification
- Anisotropic thermal conductivity: Very high thermal conductivity along length and width (X-Y-direction), very good thermal conductivity through the thickness (Z-direction)
- Silicone-free
- Very soft and flexible
- Very high temperature resistance
- No hardening, no outgasing
- Guaranteed constant layer thickness
- Very good resistance to ageing
- Low tightening torque required
- Clean and easy mounting with high process reliability

Technical specification
- **Material:** graphite
- **Colour:** dark-grey
- **Material purity:** >98 %
- **Density:** 1.35 g/cm^3
- **Volume resistivity:**
  Surface: 2.0 x 10^{-6} (at 0.125 mm); 1.5 x 10^{-6} (at 0.25 mm)
  Thickness: 2.0 x 10^{-6} (at 0.125 mm); 1.5 x 10^{-6} (at 0.25 mm)
- **Thermal conductivity:**
  X-Y-direction (surface area): 134 W/mK
  Z-direction (thickness): 6 W/mK
- **Temperature range:** -250 to +400 °C





Item	Thickness mm	Heat transfer resistance[1]	Dimensions mm	Price EURO
339633	0.125	0.032	500 x 1,000	146.00
339634	0.125	0.032	500 x 500	84.00
339635	0.25	0.064	500 x 1,000	165.00
339636	0.25	0.064	500 x 500	98.00

[1] inch^2 x °C/W

THOMAFOIL-Copper Foil

Product specification
- Precision foil made of pure copper, tempered or medium-hard

Technical specification
- **Cu-content:** 99.9 %
- **Type analysis in ppm:** Ag 500, Bi <10, Pb <50, O 500, other metals <300

Item	Thickness mm	Weight g	Design	Dimensions mm	Price EURO
48455	0.125	25.2	tempered	150 x 150	52.00
48456	0.25	50.4	tempered	150 x 150	36.00
48457	0.2	40.32	medium-hard	150 x 150	52.00

THOMAFOIL-Copper Foil - calibrated

Product specification
- Calibrated precision foil made of pure copper, hard

Technical specification
- **Cu-content:** 99.9 %
- **Type analysis in ppm:** Ag 500, Bi <10, Pb <50, O 400, other metals <300
- **Tolerance:** ±15 %

Item	Thickness mm	Weight g	Dimensions mm	Unit piece	Price EURO
48451	0.007	1.411	150 x 150	1	126.00
48452	0.013	2.52	150 x 150	1	116.00

THOMAFOIL-Zinc Foil

Product specification
- Precision foil made of purest zinc, milled

Technical specification
- **Zn-content:** 99.99 %
- **Type analysis in ppm:** Fe 19, Cd 19, Pb <40, Cu <50

Item	Thickness mm	Weight g	Dimensions mm	Unit piece	Price EURO
48842	0.125	20.08	150 x 150	1	126.00

Plates (0.1 - 60 mm)
Elastomers

THOMAPLAST®-Butyl Plate - Shore 60°

Product specification
- Very good resistance to weather, aging, and ozone
- Outstanding damping capacity
- High abrasion resistance
- Good elongation at break
- Good thermal resistance
- Lowest permeability for air, gases, and steam
- Gas diffusion approx. 10 times lower as with comparable natural rubber (CR) quality
- Good dielectrical properties
- Good resistance to hot water, hot steam, acids, and alkalis
- Poor resistance to fuel and mineral oils
- Chemical features:
  Butyl rubber is obtained by copolymerizing isobutylene with defined proportions of isoprene and vulcanized with sulfur.
  Mixing of IIR and other elastomers is not possible.
  Resistance to aging and weather decreases with increasing isoprene component.

Technical specification
- **Material:** IIR (butyl rubber / isobutylene-isoprene rubber)
- **Colour:** black
- **Shore hardness A:** 60° ±5° (DIN 53505)
- **Temperature range:** -40 to +100 °C, for a short time +120 °C
- **Density:** 1.11 g/cm^3
- **Elongation at break:** 600 %
- **Tearing strength:** 13 MPa
- **Compression set:** 35 % at +100 °C / 22 h
- **Volume resistivity:** 5 x 10^6 Ohm x cm
- **Insert:** none
- **Tolerance:** DIN ISO 3302-1 E2

Item	Thickness mm	Dimensions mm	Unit piece	Price EURO
19524	1	700 x 700	1	58.00
19525	1.5	700 x 700	1	76.00
19526	2	700 x 700	1	83.00
19527	3	700 x 700	1	101.00
19528	4	700 x 700	1	117.00
19529	5	700 x 700	1	137.00
19530	6	700 x 700	1	155.00
19531	1	1.400 x 1.400	1	106.00
19532	1.5	1.400 x 1.400	1	133.00
19533	2	1.400 x 1.400	1	155.00
19534	3	1.400 x 1.400	1	204.00
19535	4	1.400 x 1.400	1	254.00
19536	5	1.400 x 1.400	1	275.00
19537	6	1.400 x 1.400	1	306.00

THOMAPLAST®-Butyl Plate with PTFE Coat - Shore 60°

Product specification
- Tightly bonded two-plate combination made of IIR and PTFE.
- Ideally suitable for punching of sealings for the pharmaceutical packaging industry.

Technical specification
- **Material:** IIR (butyl rubber); PTFE (polytetrafluoroethylene)
- **Colour:** red (IIR), grey (PTFE)
- **Shore hardness A:** 60° ±5° (DIN 53505)
- **Thickness of PTFE coating:** 0.2 mm
- **Temperature range:** -40 to +100 °C referring to IIR
- **Diffusion rate:** very low, extraordinary permeability due to sandwich effect
- **Tolerance:** IIR ±0.3 mm; PTFE ±0.01 mm

Item	Thickness mm	Dimensions mm	Unit piece	Price EURO
19158	1.4	600 x 500	1	187.00
19159	1.4	600 x 1,000	1	298.00

Item	Thickness mm	Dimensions mm	Unit piece	Price EURO
19160	1.8	600 x 500	1	209.00
19161	1.8	600 x 1,000	1	333.00
19162	3	600 x 500	1	220.00
19163	3	600 x 1,000	1	352.00

THOMAPLAST®-CR/SBR Plate - Shore 45°

Product specification

- Good elastic behavior
- Average mechanical stability
- Good abrasion resistance
- Good thermal resistance
- Good resistance to aging, weather, and ozone
- High flame resistance
- Good resistance to diluted acids and alkalis, limited resistance to mineral oils
- Poor resistance to solvents and steam
- Chemical features:
  CR is a all-round synthetic rubber basing on polychloroprene.
  Chloroprene rubber is vulcanized in different systems influencing parameters such as compression set, oil resistance, thermal resistance, and tendency to crystallization.
  Use in contact with mineral oils possible, although swelling is stronger compared to NBR, depending on the respective compound specification.
  Less suitable for outdoor applications.

Technical specification

- **Material:** CR (chloroprene rubber)
- **Additive components:** SBR (styrene-butadiene rubber)
- **Colour:** black
- **Shore hardness A:** 45° ±5° (DIN 53505)
- **Temperature range:** -20 to +70 °C, for a short time +100 °C
- **Density:** 1.25 g/cm^3
- **Elongation at break:** 350 %
- **Tearing strength:** 6 MPa
- **Compression set:** 35 % at +70 °C / 22 h
- **Insert:** none
- **Tolerance:** DIN ISO 3302-1 E2

Item	Thickness mm	Dimensions mm	Unit piece	Price EURO
19584	1	700 x 700	1	61.00
19585	1.5	700 x 700	1	65.00
19586	2	700 x 700	1	71.00
19587	2.5	700 x 700	1	79.00
19588	3	700 x 700	1	81.00
19589	4	700 x 700	1	97.00
19590	5	700 x 700	1	112.00

Item	Thickness mm	Dimensions mm	Unit piece	Price EURO
19591	6	700 x 700	1	122.00
19592	1	1.400 x 1.400	1	105.00
19593	1.5	1.400 x 1.400	1	120.00
19594	2	1.400 x 1.400	1	129.00
19595	2.5	1.400 x 1.400	1	144.00
19596	3	1.400 x 1.400	1	150.00
19597	4	1.400 x 1.400	1	176.00
19598	5	1.400 x 1.400	1	196.00
19599	6	1.400 x 1.400	1	228.00

THOMAPLAST®-CR/SBR Plate - Shore 65°

Product specification

- Good elastic behavior
- Average mechanical stability
- Good abrasion resistance
- Good thermal resistance
- Limited resistance to weather
- High flame resistance
- Good resistance to diluted acids and alkalis, limited resistance to mineral oils
- Poor resistance to solvents and steam
- Chemical features:
  CR is a all-round synthetic rubber basing on polychloroprene.
  Chloroprene rubber is vulcanized in different systems influencing parameters such as compression set, oil resistance, thermal resistance, and tendency to crystallization.
  Use in contact with mineral oils possible, although swelling is stronger compared to NBR, depending on the respective compound specification.
  Less suitable for outdoor applications.

Technical specification

- **Material:** CR (chloroprene rubber)
- **Additive components:** SBR (styrene-butadiene rubber)
- **Colour:** black
- **Shore hardness A:** 65° ±5° (DIN 53505)
- **Temperature range:** -30 to +70 °C
- **Density:** 1.4 g/cm^3
- **Elongation at break:** 200 %
- **Tearing strength:** 6 MPa
- **Volume resistivity:** >10^9 Ohm x cm
- **Insert:** none
- **Tolerance:** DIN ISO 3302-1 E2

Item	Thickness mm	Dimensions mm	Unit piece	Price EURO
19614	0.5	600 x 600	1	54.00
19616	1	600 x 600	1	61.00

Item	Thickness mm	Dimensions mm	Unit piece	Price EURO
19617	1.5	600 x 600	1	63.00
19618	2	600 x 600	1	65.00
19619	2.5	600 x 600	1	66.00
19620	3	600 x 600	1	67.00
19621	4	600 x 600	1	69.00
19622	5	600 x 600	1	71.00
19623	6	600 x 600	1	80.00
19626	1	1,200 x 1,200	1	86.00
19627	1.5	1,200 x 1,200	1	88.00
19628	2	1,200 x 1,200	1	95.00
19629	2.5	1,200 x 1,200	1	99.00
19630	3	1,200 x 1,200	1	102.00
19631	4	1,200 x 1,200	1	120.00
19632	5	1,200 x 1,200	1	137.00
19633	6	1,200 x 1,200	1	146.00
301080	8	250 x 350	1	121.00
301081	10	250 x 350	1	139.00
301082	12	250 x 350	1	149.00
301083	15	250 x 350	1	162.00
301084	20	250 x 350	1	169.00
301085	25	250 x 350	1	177.00
301086	30	250 x 350	1	190.00
301093	8	350 x 500	1	185.00
301094	10	350 x 500	1	208.00
301095	12	350 x 500	1	220.00
301096	15	350 x 500	1	264.00
301097	20	350 x 500	1	297.00
301098	25	350 x 500	1	318.00
301099	30	350 x 500	1	330.00

THOMAPLAST®-CR/SBR Plate - Shore 80°

Product specification

- Good elastic behavior
- Average mechanical stability
- Good abrasion resistance
- Good thermal resistance
- Good resistance to aging, weather, and ozone
- High flame resistance
- Good resistance to diluted acids and alkalis, limited resistance to mineral oils
- Poor resistance to solvents and steam

- Chemical features:
  CR is a all-round synthetic rubber basing on polychloroprene. Chloroprene rubber is vulcanized in different systems influencing parameters such as compression set, oil resistance, thermal resistance, and tendency to crystallization.
  Use in contact with mineral oils possible, although swelling is stronger compared to NBR, depending on the respective compound specification.
  Less suitable for outdoor applications.

Technical specification

- **Material:** CR (chloroprene rubber)
- **Additive components:** SBR (styrene-butadiene rubber)
- **Colour:** black
- **Shore hardness A:** 80° ±5° (DIN 53505)
- **Temperature range:** -20 to +70 °C
- **Density:** 1.5 g/cm^3
- **Elongation at break:** 200 %
- **Tearing strength:** 5 MPa
- **Tear propagation resistance:** 20 N/mm
- **Compression set:** 16 % at +70 °C / 24 h
- **Insert:** none
- **Tolerance:** DIN ISO 3302-1 E2

Item	Thickness mm	Dimensions mm	Unit piece	Price EURO
19634	1	700 x 700	1	65.00
19635	1.5	700 x 700	1	68.00
19636	2	700 x 700	1	75.00
19637	2.5	700 x 700	1	81.00
19638	3	700 x 700	1	89.00
19639	4	700 x 700	1	102.00
19640	5	700 x 700	1	117.00
19641	6	700 x 700	1	137.00
19642	1	1.500 x 1.500	1	129.00
19643	1.5	1.500 x 1.500	1	124.00
19644	2	1.500 x 1.500	1	132.00
19645	2.5	1.500 x 1.500	1	146.00
19646	3	1.500 x 1.500	1	160.00
19647	4	1.500 x 1.500	1	188.00
19648	5	1.500 x 1.500	1	211.00
19649	6	1.500 x 1.500	1	247.00

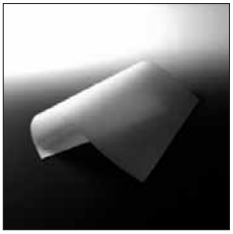
THOMAPLAST®-CR/SBR Food Plate - Shore 60°

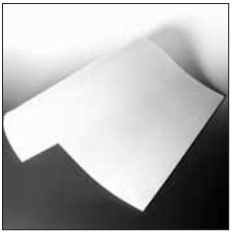
Product specification

- Good elastic behavior
- Average mechanical stability
- Good abrasion resistance
- Good resistance to aging, weather, and ozone
- High flame resistance, good thermal resistance
- Good resistance to diluted acids and alkalis, limited resistance to mineral oils
- Poor resistance to solvents and steam
- Chemical features:
  CR is a all-round synthetic rubber basing on polychloroprene. Chloroprene rubber is vulcanized in different systems influencing parameters such as compression set, oil resistance, thermal resistance, and tendency to crystallization.
  Use in contact with mineral oils possible, although swelling is stronger compared to NBR, depending on the respective compound specification.
  Less suitable for outdoor applications.

Technical specification

- **Material:** CR (chloroprene rubber)
- **Additive components:** SBR (styrene-butadiene rubber)
- **Colour:** white
- **Shore hardness A:** 60° ±5° (DIN 53505)
- **Temperature range:** -20 to +90 °C
- **Specific features:** physiologically safe
- **Density:** 1.46 g/cm³
- **Elongation at break:** 550 %
- **Tearing strength:** 6 MPa
- **Compression set:** 25 % at +72 °C / 23 h
- **Insert:** none
- **Tolerance:** DIN ISO 3302-1 E2





Item	Thickness mm	Dimensions mm	Unit piece	Price EURO
19601	1.5	700 x 700	1	79.00
19602	2	700 x 700	1	90.00
19603	3	700 x 700	1	109.00
19604	4	700 x 700	1	129.00
19605	5	700 x 700	1	151.00
19606	6	700 x 700	1	172.00
19608	1.5	1.400 x 1.400	1	143.00
19609	2	1.400 x 1.400	1	170.00
19610	3	1.400 x 1.400	1	194.00
19611	4	1.400 x 1.400	1	240.00
19612	5	1.400 x 1.400	1	269.00
19613	6	1.400 x 1.400	1	319.00

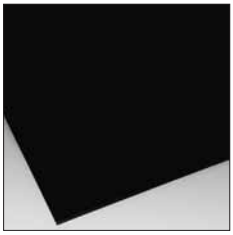
THOMAPLAST®-CR/SBR Plate with Insert - Shore 60°

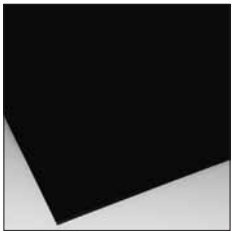
Product specification

- Robust elastomer
- Increased tensile and pressure strength
- Good mechanical properties
- Good elastic behavior
- Very high abrasion resistance
- Very good thermal resistance
- Outstanding resistance to aging and weather

Technical specification

- **Material:** CR (chloroprene rubber)
- **Additive components:** SBR (styrene-butadiene rubber)
- **Colour:** black
- **Shore hardness A:** 60° ±7° (DIN 53505)
- **Density:** 1.36 g/cm³ (DIN 53479)
- **Temperature range:** -10 to +70 °C
- **Design:** on both sides completely smooth, with polyamide fabric insert
- **Thickness tolerance:** DIN 7715 P2





Item	Thickness mm	Number of inserts	Dimensions mm	Unit piece	Price EURO
301112	2	1	250 x 350	1	77.00
301117	2	1	350 x 500	1	123.00
301122	2	1	500 x 700	1	192.00
301113	3	1	250 x 350	1	93.00
301118	3	1	350 x 500	1	144.00
301123	3	1	500 x 700	1	223.00
301114	4	1	250 x 350	1	121.00
301119	4	1	350 x 500	1	197.00
301124	4	1	500 x 700	1	300.00
301115	5	1	250 x 350	1	141.00
301120	5	1	350 x 500	1	220.00
301125	5	1	500 x 700	1	310.00
301116	6	2	250 x 350	1	156.00
301121	6	2	350 x 500	1	259.00
301126	6	2	500 x 700	1	356.00

THOMAPLAST®-CSM Plate - Shore 70°

Product specification

- Very high abrasion resistance
- Good mechanical properties
- Very good resistance to ozone, light, and weather
- Good resistance to aging
- Good cold and thermal resistance
- Good flame resistance
- Good resistance to acids and alkalis
- Limited resistance to mineral oils and derivatives
- Not resistant to fuels
- Chemical features:
  Chlorosulfonated polyethylene is based on the sulfochlorination of polyethylene. An extremely elastic, vulcanized rubber is produced by this process.
  Mineral oil resistance and flame resistance of the tubing improve with increasing chlorine content of the production formulation.

Technical specification

- **Material:** CSM (chlorosulfonyl-polyethylene rubber)
- **Colour:** black
- **Shore hardness A:** 70° ±5° (DIN 53505)
- **Temperature range:** -30 to +120 °C
- **Density:** 1.37 g/cm^3
- **Elongation at break:** 400 %
- **Tearing strength:** 8 MPa
- **Abrasion:** 390 mm^2 (DIN 53516)
- **Compression set:** 48 % at +70 °C / 22 h
- **Volume resistivity:** 1.2 x 10^{12} Ohm x cm
- **Insert:** none
- **Tolerance:** DIN ISO 3302-1 E2

Item	Thickness mm	Dimensions mm	Unit piece	Price EURO
19834	1	500 x 500	1	41.00
19835	1.5	500 x 500	1	48.00
19836	2	500 x 500	1	55.00
19837	2.5	500 x 500	1	69.00
19838	3	500 x 500	1	75.00
19839	4	500 x 500	1	99.00
19840	5	500 x 500	1	117.00
19841	1	1.500 x 1.500	1	117.00
19842	1.5	1.500 x 1.500	1	126.00
19843	2	1.500 x 1.500	1	147.00
19844	2.5	1.500 x 1.500	1	166.00
19845	3	1.500 x 1.500	1	181.00
19846	4	1.500 x 1.500	1	237.00
19847	5	1.500 x 1.500	1	262.00

THOMAPLAST®-EPDM Plate – Shore 25°

Product specification

- Extra soft quality, no cellular rubber or foam rubber
- Very good resistance to weather and aging
- Very good cold and thermal resistance
- Very good elastic behavior, good dielectrical properties
- Good resistance to hot water, hot steam, glycols, brake fluid, and polar solutions
- Limited resistance to acids and alkalis,
- Poor resistance to mineral oils and fuels
- Chemical features: EPDM is a sulfur vulcanized synthetic rubber containing diene components. The terpolymer EPDM is of outstanding stability to oxygen and ozone. Its chemical properties cause its excellent resistance to light, aging, and weather.

Technical specification

- **Material:** EPDM (ethylene-propylene-diene rubber and terpolymer rubber resp.)
- **Colour:** black
- **Shore hardness A:** 25° ±5° (DIN ISO 7619-1)
- **Temperature range:** -45 to +100 °C
- **Density:** 1.00 g/cm^3
- **Elongation at break:** >400 % (DIN 53504/ISO 37)
- **Tearing strength:** >3.5 MPa (DIN 53504/ISO 3)
- **Rebound elasticity:** >50 % (DIN 53512)
- **Tear propagation resistance:** 4.3 N/mm (DIN ISO 34-1, strip specimen); 50.7 N/mm (ASTM 624 D)
- **Compression set:** 8.5 % at +70 °C / 24 h (DIN 53517/ISO 815)
- **Volume resistivity:** 1.5 x 10^{13} Ohm x cm
- **Abrasion:** 154 mm^3 (DIN ISO 4649)
- **Burning behaviour:** 34.5 mm/min. (2.0 mm)
- **Insert:** none
- **Tolerance:** DIN ISO 3302-1 E2
- **Specific features:** nitrosamine-free, UV-resistant

Item	Thickness mm	Dimensions mm	Unit piece	Price EURO
19187	1	650 x 650	1	65.00
19188	1.5	650 x 650	1	68.00
19189	2	650 x 650	1	72.00
19190	3	650 x 650	1	86.00
19191	4	650 x 650	1	112.00
19192	1	1.300 x 1.300	1	125.00
19193	1.5	1.300 x 1.300	1	137.00
19194	2	1.300 x 1.300	1	146.00
19195	3	1.400 x 1.400	1	176.00
19196	4	1.300 x 1.300	1	242.00

THOMAPLAST®-EPDM Plate - Shore 50°

Product specification

- Very good resistance to weather and aging
- Very good cold and thermal resistance
- Good elastic behavior, good dielectrical properties
- Outstanding elongation at break and tearing strength
- Very good resistance to acids and alkalis
- Good resistance to hot water, hot steam, glycols, brake fluid, and polar solutions
- Poor resistance to mineral oils and fuels
- Chemical features:
  EPDM is a sulfur vulcanized synthetic rubber containing diene components. The terpolymer EPDM is of outstanding stability to oxygen and ozone. Its chemical properties cause its excellent resistance to light, aging, and weather.

Technical specification

- **Material:** EPDM (ethylene-propylene-diene rubber and terpolymer rubber resp.)
- **Colour:** black
- **Shore hardness A:** 50° ±5° (DIN 53505)
- **Temperature range:** -40 to +130 °C, for a short time +150 °C
- **Density:** 1.07 g/cm^3
- **Elongation at break:** 350 %
- **Tearing strength:** 12 MPa
- **Rebound elasticity:** 45 %
- **Tear propagation resistance:** 132.6 N/mm (ASTM 624 D)
- **Compression set:** 11.3 % at +70 °C / 24 h
- **Surface resistivity:** 10^8 Ohm (DIN EN 100 015/1)
- **Abrasion:** 77 mm^3 (DIN ISO 4649)

- **Burning behaviour:** 20 mm/min (FMVSS302)
- **Insert:** none
- **Tolerance:** DIN ISO 3302-1 E2
- **Regulations:** KTW-approval D1 and D2 (approved for drinking water, food quality); Works standard specification: Volkswagenwerk (VW 2.8.1 G50)

Item	Thickness mm	Dimensions mm	Unit piece	Price EURO
19568	1	650 x 650	1	69.00
19569	1.5	650 x 650	1	76.00
19570	2	650 x 650	1	79.00
19572	3	650 x 650	1	97.00
19573	4	650 x 650	1	109.00
19574	5	650 x 650	1	125.00
19575	6	650 x 650	1	147.00
19576	1	1.300 x 1.300	1	114.00
19577	1.5	1.300 x 1.300	1	142.00
19578	2	1.300 x 1.300	1	150.00
19580	3	1.300 x 1.300	1	175.00
19581	4	1.300 x 1.300	1	234.00
19582	5	1.300 x 1.300	1	250.00
19583	6	1.300 x 1.300	1	274.00

THOMAPLAST®-EPDM Plate - Shore 65°

Product specification

- Food quality
- Very good resistance to weather and aging
- Very good cold and thermal resistance
- Good elastic behavior, good dielectrical properties
- Good elongation at break and tearing strength
- Very good resistance to acids and alkalis
- Good resistance to hot water, hot steam, glycols, brake fluid, and polar solutions
- Poor resistance to mineral oils and fuels
- Chemical features:
  EPDM is a sulfur vulcanized synthetic rubber containing diene components. The terpolymer EPDM is of outstanding stability to oxygen and ozone. Its chemical properties cause its excellent resistance to light, aging, and weather.

Technical specification

- **Material:** EPDM (ethylene-propylene-diene rubber and terpolymer rubber resp.)
- **Colour:** black
- **Shore hardness A:** 65° ±5° (DIN 53505)
- **Temperature range:** -35 to +130 °C, for a short time +150 °C
- **Density:** 1.13 g/cm^3
- **Elongation at break:** >230 % (DIN 53504 / ISO 37)
- **Tearing strength:** 12.5 MPa (DIN 53504 / ISO 3)
- **Rebound elasticity:** >35 % (DIN 53512)
- **Compression set:** 7.5 % at +70 °C / 24 h
- **Volume resistivity:** 4.61 x 10^7 Ohm x cm
- **Tear propagation resistance:** 121.6 N/mm (ASTM 624 D)
- **Abrasion:** 163 mm^3 (DIN ISO 4649)
- **Burning behaviour:** 21.7 mm/min
- **Insert:** none
- **Specific features:** sulfur-free, peroxide cross-linked, indifferent to lacquer, silicone-free, nitrosamine-free
- **Tolerance:** DIN ISO 3302-1 E2
- **Approvals**: KTW-D1 and D2 for hot water +85 °C according to FDA §177.2600; Works standard specification: Volkswagenwerk (VW 2.8.1 G50), DBL 5556.21

Item	Thickness mm	Dimensions mm	Unit piece	Price EURO
19554	1	650 x 650	1	65.00
19555	1.5	650 x 650	1	72.00
19556	2	650 x 650	1	75.00
19557	3	650 x 650	1	97.00
19558	4	650 x 650	1	110.00
19559	5	650 x 650	1	137.00
19560	6	650 x 650	1	166.00
19561	1	1.300 x 1.300	1	111.00
19562	1.5	1.300 x 1.300	1	126.00
19563	2	1.300 x 1.300	1	119.00
19564	3	1.300 x 1.300	1	180.00
19565	4	1.300 x 1.300	1	199.00
19566	5	1.300 x 1.300	1	262.00
19567	6	1.300 x 1.300	1	281.00

THOMAPLAST®-EPDM Plate - Shore 80°

Product specification

- Very good resistance to weather
- Good resistance to aging
- Very good cold and thermal resistance
- Medium elongation at break
- Good dielectrical properties
- Good resistance to acids, alkalis, hot water, hot steam, glycols, and polar solutions
- Poor resistance to mineral oils and fuels
- Chemical features:
  EPDM is a sulfur vulcanized synthetic rubber containing diene components. The terpolymer EPDM is of outstanding stability to oxygen and ozone. Its chemical properties cause its excellent resistance to light, aging, and weather.

Technical specification

- **Material:** EPDM (ethylene-propylene-diene rubber and terpolymer rubber resp.)
- **Colour:** black
- **Shore hardness A:** 80° ±5° (DIN 53505)
- **Temperature range:** -40 to +100 °C
- **Specific features:** sulfur vulcanized
- **Density:** 1.40 g/cm^3
- **Elongation at break:** 300 %
- **Tearing strength:** 5 MPa
- **Insert:** none
- **Tolerance:** DIN ISO 3302-1 E2

Item	Thickness mm	Dimensions mm	Unit piece	Price EURO
19538	1	600 x 600	1	51.00
19539	1.5	600 x 600	1	62.00
19540	2	600 x 600	1	70.00
19541	2.5	600 x 600	1	74.00
19542	3	600 x 600	1	78.00
19543	4	600 x 600	1	90.00
19544	5	600 x 600	1	102.00
19545	6	600 x 600	1	111.00
19546	1	1,200 x 1,200	1	81.00
19547	1.5	1,200 x 1,200	1	107.00
19548	2	1,200 x 1,200	1	135.00
19549	2.5	1,200 x 1,200	1	148.00
19550	3	1,200 x 1,200	1	157.00
19551	4	1,200 x 1,200	1	176.00
19552	5	1,200 x 1,200	1	216.00
19553	6	1,200 x 1,200	1	253.00

THOMAPLAST®-EPDM Sheet with PTFE Coat

Technical specification

- **Material:** EPDM (ethylene-propylene-diene rubber and terpolymer rubber resp.), PTFE (polytetrafluoroethylene)
- **Colour:** black (EPDM), white (PTFE)

Item	Thickness of carrier layer mm	Thickness of coating mm	Dimensions mm	Unit piece	Price EURO
81257	2	0.2	300 x 300	1	116.00
81258	3	0.2	300 x 300	1	144.00
81259	4	0.2	300 x 300	1	151.00
81261	2	0.2	150 x 150	1	72.00
81262	3	0.2	150 x 150	1	90.00
81263	4	0.2	150 x 150	1	95.00

THOMAPLAST®-High-Chem EPDM/PP Plate - Shore 64°

Application area

- Pharmacy, medicine, chemistry and biology, beverage industry, fermenters, container and tank construction, machine and apparatus engineering

Product specification

- Sheets made of recyclable thermoplastic elastomer with a lot of possible applications
- Very durable
- Especially resistant to deformation and bending
- Very well suited for food contact
- Very good resistance to aqueous media, acids, alkalis and many organic solvents, particularly to alcohols, glycols, ketones, aldehydes and esters
- Good resistance to milk and vegetable oils
- Unstable to hydrocarbons, fuels, mineral oils and hydraulic oils
- Excellent resistance to ozone and UV radiation
- Excellent resistance to aging
- Easily to weld by heating, e.g. to make round sleeves
- Low gas and water vapor permeability
- High tensile strength

Technical specification

- **Material:** EPDM/PP (thermoplastic elastomer); Compound of EPDM (ethylene-propylene-diene rubber) and PP (polypropylene) as well as stabilizing additives
- **Colour:** beige
- **Shore hardness A:** 64° ±5° (DIN 53505)
- **Density:** 0.97 ±0.3 g/cm^3 (DIN 53479)
- **Temperature range:** -45 to +135 °C, for a short time +150 °C
- **Melting point:** >+162 °C; decomposition >+265 °C
- **Elongation at break:** >400 % (DIN 53504)
- **Tensile strength:** >6.5 MPa (DIN 53504)
- **Elastic modulus:** 2.3 MPa (DIN 53504)
- **Compression set:**
  +25 °C / 168 h: 23 % (ASTM D 995 method B)
  +100 °C / 168 h: 36 % (ASTM D 995 method B)
- **Tolerance:** DIN ISO 3302-1 E2
- **Sterilization:** water vapor (+134 °C), gas (ethylene oxide), gamma rays (up to 4 megarads)
- **Regulations:** FDA standard 21, CFR § 177.2600, LMBG, NSF 51, EU 2003/11/EC

Item	Thickness mm	Dimensions mm	Price EURO
301020	0.5	300 x 1,000	66.00
301021	1	300 x 1,000	106.00
301022	1.5	300 x 1,000	120.00
301023	2	300 x 1,000	133.00
301024	3	300 x 1,000	160.00

THOMAPLAST®-FPM Plate - Shore 70°

Product specification

- Very good resistance to ozone and oxygen
- Very good resistance to aging and weather
- Sulfur-free
- High flame resistance
- Highest temperature resistance
- Excellent thermal resistance
- Good elongation at break
- Relative abrasion resistance
- Limited flexibility in cold
- Very good chemical resistance to petrol, oil, acids, and alkalis
- Chemical features:
  FPM are copolymers of highest quality made of fluorinated hydrocarbons. Fluorinated rubber belongs to the most expensive elastomers and is used exclusively in chemical-technical application areas according to its highly qualified features.
  Its outstanding thermal and chemical properties are unrenounceable especially in the sealing technique.
  Basically, a difference is made between copolymer made of vinylidene fluoride with hexafluoro propylene and FPM-terpolymer with improved chemical resistance and flexibility in the cold.

Technical specification

- **Material:** FPM (fluorinated hydrocarbon polymer)
- **Colour:** black
- **Shore hardness A:** 70° ±5° (DIN 53505)
- **Temperature range:** -20 to +200 °C, for a short time +250 °C
- **Density:** 1.9 - 2.1 g/cm^3
- **Elongation at break:** 270 % (DIN 53504)
- **Tearing strength:** 7 MPa (DIN 53504)
- **Compression set:** 40 % at +175 °C / 24 h
- **Volume resistivity:** 5.5 x 10^{12} Ohm x cm
- **Insert:** none
- **Tolerance:** DIN ISO 3302-1 E2
- **Burning behaviour:** UL 94 V-0
- **Specific features:** bisphenol-crosslinked

Item	Thickness mm	Dimensions mm	Unit piece	Price EURO
333895	0.5	500 x 500	1	136.00
19911	1	500 x 500	1	212.00
19912	1.5	500 x 500	1	245.00
19913	2	500 x 500	1	268.00
19914	3	500 x 500	1	325.00
19915	4	500 x 500	1	356.00
19916	5	500 x 500	1	398.00
333896	0.5	1,000 x 1,000	1	419.00
19917	1	1.500 x 500	1	663.00
19918	1.5	1.500 x 500	1	774.00
19920	2	1.500 x 1,000	1	913.00
19921	3	1.500 x 1,000	1	1,273.00
19922	4	1.500 x 1,000	1	1,514.00
19923	5	1.500 x 1,000	1	1,886.00

THOMAPLAST®-FPM Plate - Shore 75°

Product specification

- Very good resistance to ozone and oxygen
- Very good resistance to aging and weather
- High flame resistance
- Highest temperature resistance
- Very good thermal resistance
- Self-extinguishing
- Sulfur-free
- Moderate elongation at break
- Relative abrasion resistance
- Limited flexibility in cold
- Good chemical resistance to petrol, oil, acids, and alkalis
- Chemical features:
  FPM are copolymers of highest quality made of fluorinated hydrocarbons. Fluorinated rubber belongs to the most expensive elastomers and is used exclusively in chemical-technical application areas according to its highly qualified features.
  Its outstanding thermal and chemical properties are unrenounceable especially in the sealing technique.
  Basically, a difference is made between copolymer made of vinylidene fluoride with hexafluoro propylene and FPM-terpolymer with improved chemical resistance and flexibility in the cold.

Technical specification

- **Material:** FPM (fluorinated hydrocarbon polymer)
- **Colour:** black
- **Shore hardness A:** 75° ±5° (DIN 53505)
- **Temperature range:** -10 to +200 °C, for a short time +250 °C
- **Density:** 1.85 - 1.93 g/cm^3
- **Elongation at break:** 180 % (DIN 53504)
- **Tearing strength:** 10 MPa (DIN 53504)
- **Compression set:** 25 % at +200 °C / 24 h
- **Volume resistivity:** 1.6 x 10^{11} Ohm x cm
- **Insert:** none
- **Tolerance:** DIN ISO 3302-1 E2
- **Burning behaviour:** UL 94 V-0
- **Specific features:** bisphenol-crosslinked, electrical isolation, E10-conform, E85-conform (Bioethanol)
- **Regulations:** FDA-conform

Item	Thickness mm	Dimensions mm	Unit piece	Price EURO
40255	1	200 x 200	1	84.00
40257	1.5	200 x 200	1	133.00

Item	Thickness mm	Dimensions mm	Unit piece	Price EURO
40259	2	200 x 200	1	138.00
40261	3	200 x 200	1	159.00
40263	4	200 x 200	1	235.00
40256	1	300 x 300	1	140.00
40258	1.5	300 x 300	1	175.00
40260	2	300 x 300	1	190.00
40262	3	300 x 300	1	230.00
40264	4	300 x 300	1	299.00
19894	0.5	500 x 500	1	132.00
19895	1	500 x 500	1	151.00
19896	1.5	500 x 500	1	188.00
19897	2	500 x 500	1	207.00
19899	3	500 x 500	1	265.00
19900	4	500 x 500	1	299.00
19901	5	500 x 500	1	321.00
19902	6	500 x 500	1	370.00
19903	0.5	1,000 x 1,000	1	269.00
19904	1	1,000 x 1,000	1	320.00
19905	1.5	1,000 x 1,000	1	401.00
19906	2	1,000 x 1,000	1	473.00
19907	3	1,000 x 1,000	1	700.00
19908	4	1,000 x 1,000	1	818.00
19909	5	1,000 x 1,000	1	1,016.00
19910	6	1,000 x 1,000	1	1,255.00

THOMAPLAST®-FPM Sheet with PTFE Coat

Technical specification

- **Material:** FPM (fluorinated hydrocarbon polymer), PTFE (polytetrafluoroethylene)
- **Colour:** black (FPM), white (PTFE)

Item	Thickness of carrier layer mm	Thickness of coating mm	Dimensions mm	Unit piece	Price EURO
81275	2	0.2	300 x 300	1	233.00
81276	3	0.2	300 x 300	1	300.00
81277	4	0.2	300 x 300	1	392.00
81279	2	0.2	150 x 150	1	98.00
81280	3	0.2	150 x 150	1	121.00
81281	4	0.2	150 x 150	1	151.00

THOMAPLAST®-NBR Plate - Shore 65°

Product specification

- Very good abrasion resistance
- Outstanding rubber-elastic properties also at extreme bending radiuses
- Good thermal resistance
- Good resistance to aging and weather
- Very good resistance to mineral oils, vegetable and animal oils, silicone as well as diluted acids and alkalis at room temperature
- Insufficient resistance to solvents and flame-resistant hydraulic fluids
- Good resistance to super petrol
- Chemical features:
  Nitrile rubber is a copolymer basing on butadiene and acrylonitrile. Resistance to fuels and mineral oils improves with increasing acrylonitrile component, but at the same time elastic behavior, cold flexibility, and gas tightness deteriorate.

Technical specification

- **Material:** NBR (nitrile-butadiene rubber)
- **Colour:** black
- **Shore hardness A:** 65° ±5° (DIN 53505)
- **Temperature range:** -30 to +120 °C
- **Density:** 1.48 g/cm^3
- **Elongation at break:** 350 %
- **Tearing strength:** 7 MPa
- **Compression set:** <30 % at +100 °C / 70 h
- **Insert:** none
- **Specific features:** sulfur-crosslinked

Item	Thickness mm	Dimensions mm	Unit piece	Price EURO
196661	0.5	600 x 600	1	49.00
19666	1	700 x 700	1	58.00
19667	1.5	700 x 700	1	61.00
19668	2	700 x 700	1	68.00
19669	2.5	700 x 700	1	72.00
19670	3	700 x 700	1	75.00
19671	4	700 x 700	1	89.00
19672	5	700 x 700	1	97.00
19673	6	700 x 700	1	111.00
19674	1	1.400 x 1.400	1	86.00
19675	1.5	1.400 x 1.400	1	101.00
19676	2	1.400 x 1.400	1	117.00
19677	2.5	1.400 x 1.400	1	127.00
19678	3	1.400 x 1.400	1	132.00
19679	4	1.400 x 1.400	1	150.00
19680	5	1.400 x 1.400	1	170.00
19681	6	1.400 x 1.400	1	198.00

THOMAPLAST®-NBR Plate - Shore 80°

Product specification

- Absolutely gas-tight
- Very good abrasion resistance
- Medium rubber-elastic behavior
- Good thermal resistance
- Poor resistance to aging and weather
- Good resistance to mineral oils, fuels, vegetable and animal oils, silicones as well as diluted acids and alkalis at room temperature
- Insufficient resistance to solvents and flame-resistant hydraulic fluids
- Chemical features:
  Nitrile rubber is a copolymer basing on butadiene and acrylonitrile. Resistance to fuels and mineral oils improves with increasing acrylonitrile component.

Technical specification

- **Material:** NBR (nitrile-butadiene rubber)
- **Colour:** black
- **Shore hardness A:** 80° ±5° (DIN 53505)
- **Temperature range:** -15 to +80 °C
- **Specific features:** absolutely gas-tight
- **Density:** 1.35 g/cm^3
- **Elongation at break:** 250 %
- **Tearing strength:** 13 MPa
- **Compression set:** 35 % at +100 °C / 168 h
- **Volume resistivity:** 1.2 x 10^4 Ohm x cm
- **Insert:** none
- **Tolerance:** DIN ISO 3302-1 E2
- **Regulations:** DVGW approval

Item	Thickness mm	Dimensions mm	Unit piece	Price EURO
19818	1	700 x 700	1	79.00
19819	1.5	700 x 700	1	88.00
19820	2	700 x 700	1	108.00
19821	2.5	700 x 700	1	120.00
19822	3	700 x 700	1	130.00
19823	4	700 x 700	1	153.00
19824	5	700 x 700	1	178.00
19825	6	700 x 700	1	206.00
19826	1	1.400 x 1.400	1	141.00
19827	1.5	1.400 x 1.400	1	162.00
19828	2	1.400 x 1.400	1	191.00
19829	2.5	1.400 x 1.400	1	214.00
19830	3	1.400 x 1.400	1	224.00
19831	4	1.400 x 1.400	1	293.00
19832	5	1.400 x 1.400	1	360.00
19833	6	1.400 x 1.400	1	424.00

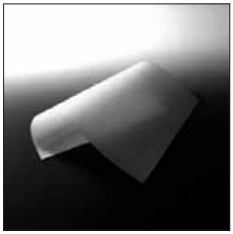
THOMAPLAST®-NBR Food Plate - Shore 60°

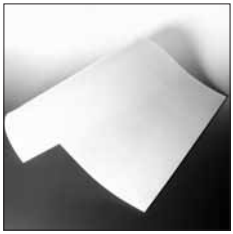
Product specification

- Food quality
- Very good abrasion resistance
- Outstanding rubber-elastic properties also at extreme bending radiuses
- Good thermal resistance
- Good resistance to aging and weather
- Good resistance to mineral oils, vegetable and animal oils, silicone as well as diluted acids and alkalis at room temperature
- Insufficient resistance to solvents, flame-resistant hydraulic fluids, and fuels
- Chemical features:
  Nitrile rubber is a copolymer basing on butadiene and acrylonitrile. Resistance to fuels and mineral oils improves with increasing acrylonitrile component, but at the same time elastic behavior, cold flexibility, and gas tightness deteriorate.

Technical specification

- **Material:** NBR (nitrile-butadiene rubber)
- **Colour:** white
- **Shore hardness A:** 60° ±5° (DIN 53505)
- **Temperature range:** -30 to +80 °C
- **Specific features:** indifferent to lacquer
- **Density:** 1.32 g/cm^3
- **Elongation at break:** 500 %
- **Tearing strength:** 11 MPa
- **Compression set:** 35 % at +70 °C / 22 h
- **Volume resistivity:** 2 x 10^{12} Ohm x cm
- **Insert:** none
- **Regulations:** KTW-approval; BgVV XXI Cat.2





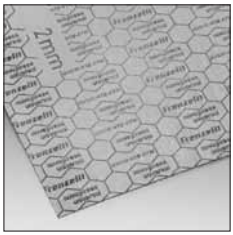
Item	Thickness mm	Dimensions mm	Unit piece	Price EURO
19682	1	700 x 700	1	69.00
19683	1.5	700 x 700	1	72.00
19684	2	700 x 700	1	86.00
19685	2.5	700 x 700	1	94.00
19686	3	700 x 700	1	104.00
19687	4	700 x 700	1	119.00
19688	5	700 x 700	1	137.00
19689	6	700 x 700	1	155.00
19690	1	1.400 x 1.400	1	114.00
19691	1.5	1.400 x 1.400	1	135.00
19692	2	1.400 x 1.400	1	153.00
19693	2.5	1.400 x 1.400	1	162.00
19694	3	1.400 x 1.400	1	184.00
19695	4	1.400 x 1.400	1	200.00
19696	5	1.400 x 1.400	1	252.00
19697	6	1.400 x 1.400	1	275.00

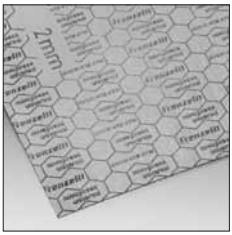
THOMAPLAST®-High-Tech NBR/Aramid Packing Plate - PTFE-coated

Application area
- For plant and pipeline construction, for building of apparatuses and machines, for use in the beverage and food processing industry

Product specification
- Outstanding tensile strength, good pressure stability
- Very low gas leakage
- Very good resistance to oils
- Very high temperature load possible
- Simultaneous load with maximum permissible values of pressure and temperature is not allowed during operation

Technical specification
- **Material:** NBR-bonded material on aramid fibre base; NBR (butadiene-acrylonitrile rubber)
- **Colour:** green with black print
- **Max. temperature:** +150 °C, for a short time +300 °C
- **Density:** 1.8 g/cm³ (DIN 53479)
- **Max. operating pressure:** 100 bar
- **Pressure resistance:** >25 N/mm² at +300 °C (DIN 52913)
- **Resilience:** >55 % (ASTM F 36 J)
- **Compressibility:** 5 - 12 % (ASTM F 36 J)
- **Permeability to gas:** <0.5 cm³/min. (DIN 3535 T.4)
- **Regulations:** gas leakage DIN 3535 Part 6 <0.5 ml/min. DVGM, SVGW, KTW, BAM, HTB
- **Design:** PTFE-coated (both sides)





Item	Thickness mm	Tolerance mm	Dimensions mm	Unit piece	Price EURO
300960	1	±0.1	750 x 750	1	177.00
300961	1.5	±0.2	750 x 750	1	202.00
300962	2	±0.2	750 x 750	1	225.00

THOMAPLAST®-NBR/SBR Plate - Shore 50°

Product specification
- Very good abrasion resistance
- Outstanding rubber-elastic properties also at extreme bending radiuses
- Good thermal resistance
- Good resistance to aging and weather
- Average mechanical stability
- Very good resistance to mineral oils, vegetable and animal oils, silicone as well as diluted acids and alkalis at room temperature
- Insufficient resistance to solvents, flame-resistant hydraulic fluids, and fuels.
- Chemical features:
  Nitrile rubber is a copolymer basing on butadiene and acrylonitrile. Resistance to fuels and mineral oils improves with increasing acrylonitrile component, but at the same time elastic behavior, cold flexibility, and gas tightness deteriorate.

Technical specification
- **Material:** NBR (nitrile-butadiene rubber)
- **Additive components:** SBR (styrene-butadiene rubber)
- **Colour:** black
- **Shore hardness A:** 50° ±5° (DIN 53505)
- **Temperature range:** -35 to +70 °C
- **Density:** 1.3 g/cm³
- **Elongation at break:** 200 %
- **Tearing strength:** 4 MPa
- **Compression set:** 40 % at +70 °C / 22 h
- **Insert:** none
- **Tolerance:** DIN ISO 3302-1 E2

Item	Thickness mm	Dimensions mm	Unit piece	Price EURO
19650	1	600 x 600	1	68.00
19651	1.5	600 x 600	1	71.00
19652	2	600 x 600	1	79.00
19653	2.5	600 x 600	1	86.00
19654	3	600 x 600	1	97.00
19655	4	600 x 600	1	115.00
19656	5	600 x 600	1	132.00
19657	6	600 x 600	1	151.00
19658	1	1,200 x 1,200	1	135.00
19659	1.5	1,200 x 1,200	1	126.00
19660	2	1,200 x 1,200	1	147.00
19661	2.5	1,200 x 1,200	1	155.00
19662	3	1,200 x 1,200	1	166.00
19663	4	1,200 x 1,200	1	211.00
19664	5	1,200 x 1,200	1	240.00
19665	6	1,200 x 1,200	1	273.00

THOMAPLAST®-NBR/SBR Plate - Shore 80°

Product specification
- Very good abrasion resistance
- Good rubber-elastic properties also at extreme bending radiuses
- Good thermal resistance
- Low resistance to aging and weather
- Average mechanical stability
- Limited resistance to mineral oils, vegetable and animal oils, silicone as well as diluted acids and alkalis at room temperature
- Insufficient resistance to solvents, flame-resistant hydraulic fluids, and fuels
- Chemical features:
  Nitrile rubber is a copolymer basing on butadiene and acrylonitrile. Resistance to fuels and mineral oils improves with increasing acrylonitrile component, but at the same time elastic behavior, cold flexibility, and gas tightness deteriorate.

Technical specification

- **Material:** NBR (nitrile-butadiene rubber)
- **Additive components:** SBR (styrene-butadiene rubber)
- **Colour:** black
- **Shore hardness A:** 80° ±5° (DIN 53505)
- **Temperature range:** -20 to +70 °C
- **Density:** 1.4 g/cm³
- **Elongation at break:** 200 %
- **Tearing strength:** 5 MPa
- **Compression set:** 30 % at +70 °C / 22 h
- **Insert:** none
- **Tolerance:** DIN ISO 3302-1 E2

Item	Thickness mm	Dimensions mm	Unit piece	Price EURO
19698	1	500 x 500	1	65.00
19699	1.5	500 x 500	1	68.00
19700	2	500 x 500	1	72.00
19701	2.5	500 x 500	1	76.00
19702	3	500 x 500	1	80.00
19703	4	500 x 500	1	83.00
19704	5	500 x 500	1	92.00
19705	6	500 x 500	1	97.00
19706	1	1.500 x 1.500	1	104.00
19707	1.5	1.500 x 1.500	1	124.00
19708	2	1.500 x 1.500	1	144.00
19709	2.5	1.500 x 1.500	1	154.00
19710	3	1.500 x 1.500	1	174.00
19711	4	1.500 x 1.500	1	193.00
19712	5	1.500 x 1.500	1	233.00
19713	6	1.500 x 1.500	1	260.00

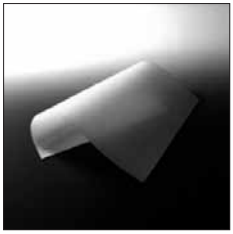
THOMAPLAST®-NR/SBR Food Plate - Shore 45°

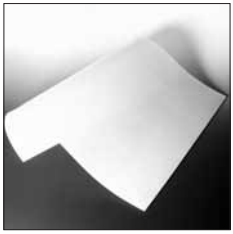
Product specification

- Food quality
- High tearing strength
- Very good impact elasticity
- Good elastic behavior
- Outstanding abrasion resistance
- High cohesive friction
- Good resistance to aging
- Good resistance to acids and alkalis
- Not resistant to mineral oils, solvents, and fuels
- Chemical features:
  SBR is a synthetic rubber with properties similar to natural rubber. Copolymers made of SBR base on butadiene rubber and have a styrene content of 10 % to 35 %. With increasing styrene component, the properties of SBR change to limited elasticity.
  SBR is often mixed with NR, an ideal material symbiosis making use of the outstanding elastic behavior of NR.

Technical specification

- **Material:** NR (natural rubber)
- **Additive components:** SBR (styrene-butadiene rubber)
- **Colour:** white
- **Shore hardness A:** 45° ±5° (DIN 53505)
- **Temperature range:** -30 to +70 °C
- **Specific features:** food quality; FDA §177.2600 and BgVV XXI, Cat. 1
- **Density:** 1.27 g/cm³
- **Elongation at break:** 550 %
- **Tearing strength:** 12 MPa
- **Compression set:** 35 % at +70 °C / 22 h
- **Insert:** none
- **Tolerance:** DIN ISO 3302-1 E2





Item	Thickness mm	Dimensions mm	Unit piece	Price EURO
19714	1	700 x 700	1	65.00
19715	1.5	700 x 700	1	71.00
19716	2	700 x 700	1	75.00
19717	2.5	700 x 700	1	83.00
19718	3	700 x 700	1	90.00
19719	4	700 x 700	1	109.00
19720	5	700 x 700	1	122.00
19721	6	700 x 700	1	145.00
19722	1	1.400 x 1.400	1	110.00
19723	1.5	1.400 x 1.400	1	121.00
19724	2	1.400 x 1.400	1	129.00
19725	2.5	1.400 x 1.400	1	148.00
19726	3	1.400 x 1.400	1	167.00
19727	4	1.400 x 1.400	1	204.00
19728	5	1.400 x 1.400	1	219.00
19729	6	1.400 x 1.400	1	262.00

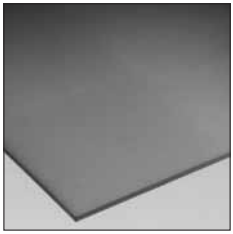
THOMAPLAST®-PUR Plate - Shore 72°

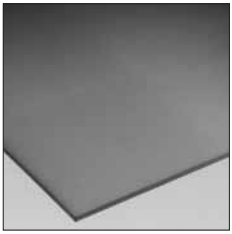
Product specification

- Very good mechanical properties
- Outstandingly elastic behavior, comparable to soft rubber
- Very good resistance to abrasion
- Especially smooth surface
- Good tear propagation resistance (tearing strength)
- High self-damping
- Equipped with protection to hydrolysis
- Resistant to aging
- Only relatively usable for slipping functions
- Material with rubber-elastic properties for highest mechanical load in machine and apparatus construction.
- Excellent chemical resistance to oils, good chemical resistance to petrols, of limited resistance to acids and alkalis.

Technical specification

- **Material:** PUR (polyurethane)
- **Colour:** brown
- **Shore hardness A:** 72° ±5° (DIN 53505)
- **Temperature range:** -10 to +60 °C
- **Specific features:** high tearing strength, fitted with protection to hydrolysis
- **Density:** 1.24 g/cm^3 (DIN 53479)
- **Elongation at break:** 550 % (DIN 53504)
- **Tearing strength:** 44 MPa (DIN 53504)
- **Abrasion:** 30 mm^2 (DIN 53516)
- **Tear propagation resistance**: 15 N/mm (DIN 53507)
- **Compression set:** 20 % at +70 °C / 24 h
- **Insert:** none
- **Tolerance:** DIN 7715 T5 P3





Item	Thickness mm	Dimensions mm	Unit piece	Price EURO
300126	0.5	500 x 500	1	71.00
300127	1	500 x 500	1	75.00
300128	1.5	500 x 500	1	79.00
300129	2	500 x 500	1	89.00
300130	2.5	500 x 500	1	101.00
300131	3	500 x 500	1	112.00
300132	4	500 x 500	1	132.00
300133	5	500 x 500	1	153.00
300135	1	1,000 x 1,000	1	135.00
300136	1.5	1,000 x 1,000	1	138.00
300137	2	1,000 x 1,000	1	158.00
300138	2.5	1,000 x 1,000	1	185.00
300139	3	1,000 x 1,000	1	211.00
300140	4	1,000 x 1,000	1	249.00
300141	5	1,000 x 1,000	1	298.00

THOMAPLAST®-PUR Plate - Shore 80°

Product specification

- Very good mechanical properties
- Elastic behavior
- Very good resistance to abrasion
- Especially smooth surface
- Good tear propagation resistance (tearing strength)
- High self-damping
- Equipped with protection to hydrolysis
- Resistant to aging
- Only relatively usable for slipping functions
- Material with rubber-elastic properties for highest mechanical load in machine and apparatus construction.
- Excellent chemical resistance to oils, good chemical resistance to petrols, of limited resistance to acids and alkalis.

Technical specification

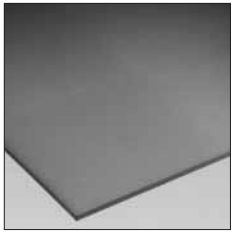
- **Material:** PUR (polyurethane)
- **Colour:** brown
- **Shore hardness A:** 80° ±5° (DIN 53505)
- **Temperature range:** -10 to +60 °C
- **Specific features:** high tearing strength, fitted with protection to hydrolysis
- **Density:** 1.24 g/cm^3 (DIN 53479)
- **Elongation at break:** 570 % (DIN 53504)
- **Tearing strength:** 46 MPa (DIN 53504)
- **Abrasion:** 29 mm^2 (DIN 53516)
- **Tear propagation resistance:** 25 N/mm (DIN 53507)
- **Compression set:** 26 % at +70 °C / 24 h
- **Insert:** none
- **Tolerance:** DIN 7715 T5 P3

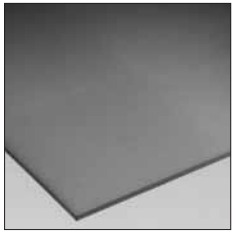
Item	Thickness mm	Dimensions mm	Unit piece	Price EURO
300110	0.5	500 x 500	1	71.00
300111	1	500 x 500	1	75.00
300112	1.5	500 x 500	1	79.00
300113	2	500 x 500	1	89.00
300114	2.5	500 x 500	1	101.00
300115	3	500 x 500	1	112.00
300116	4	500 x 500	1	132.00
300117	5	500 x 500	1	153.00
300119	1	1,000 x 1,000	1	135.00
300120	1.5	1,000 x 1,000	1	138.00
300121	2	1,000 x 1,000	1	158.00
300122	2.5	1,000 x 1,000	1	185.00
300123	3	1,000 x 1,000	1	211.00
300124	4	1,000 x 1,000	1	249.00
300125	5	1,000 x 1,000	1	298.00

THOMAPLAST®-PUR Plate - Shore 90°

Product specification

- Very good mechanical properties
- Very good resistance to abrasion
- Especially smooth surface
- Cutting possible from Shore A 90 onwards
- Good tear propagation resistance (tearing strength)
- Good self-damping
- Equipped with protection to hydrolysis
- Resistant to aging
- Only relatively usable for slipping functions
- Material with rubber-elastic properties for highest mechanical load in machine and apparatus construction.
- Excellent chemical resistance to oils, good chemical resistance to petrols, of limited resistance to acids and alkalis.
- Resistant to ozone and UV radiation.





Technical specification

- **Material:** PUR (polyurethane)
- **Colour:** brown
- **Shore hardness A:** 90° ±5° (DIN 53505)
- **Temperature range:** -10 to +60 °C
- **Specific features:** high tearing strength, fitted with protection to hydrolysis
- **Density:** 1.25 g/cm³ (DIN 53479)
- **Elongation at break:** 600 % (DIN 53504)
- **Tearing strength:** 48 MPa (DIN 53504)
- **Abrasion:** 32 mm³ (DIN 53516)
- **Tear propagation resistance:** 45 N/mm (DIN 53507)
- **Compression set:** 20 % at +70 °C / 24 h
- **Insert:** none
- **Tolerance:** DIN 7715 T5 P3

Item	Thickness mm	Dimensions mm	Unit piece	Price EURO
300094	0.5	500 x 500	1	71.00
300095	1	500 x 500	1	75.00
300096	1.5	500 x 500	1	79.00
300097	2	500 x 500	1	89.00
300098	2.5	500 x 500	1	101.00
300099	3	500 x 500	1	112.00
300100	4	500 x 500	1	132.00
300101	5	500 x 500	1	153.00
300103	1	1,000 x 1,000	1	135.00
300104	1.5	1,000 x 1,000	1	138.00
300105	2	1,000 x 1,000	1	158.00
300106	2.5	1,000 x 1,000	1	185.00
300107	3	1,000 x 1,000	1	211.00
300108	4	1,000 x 1,000	1	249.00
300109	5	1,000 x 1,000	1	298.00

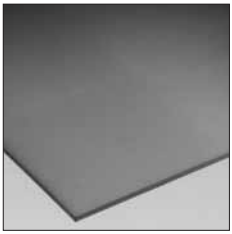
Vulkollan®-Plate - Shore 70°

Application area

- Roller covering, drive and bearing elements, damping elements, coupling elements, spring elements, sealings

Product specification

- High-performance polyurethane elastomer
- Constant elastomer quality due to closely specified quality control
- Excellent mechanical wear resistance
- Very good resistance to abrasion
- Remarkable elasticity over the complete hardness range
- Good tear propagation resistance
- High self-damping, low compression set
- Only relatively suitable for slipping functions
- Free of plasticizers
- Very good resistance to ozone, UV, and high-energy radiation
- Good resistance to weather and aging
- Good resistance to many oils, fats, petrols, and different solvents



Technical specification

- **Material:** PUR (Vulkollan® D 15); PUR (polyester polyol and naphthylene-1,5-diisocyanate (Desmodur 15)) as well as with additional, special chain elongators
- **Colour:** natural
- **Shore hardness A:** 70° ±5° (DIN 53505)
- **Temperature range:** -25 to +80 °C
- **Density:** 1.24 g/cm³ (DIN 53479)
- **Tearing strength:** 40 MPa (DIN 53504)
- **Elongation at break:** 620 % (DIN 53504)
- **Tension:** at 100 % elongation: 3 MPa, at 300 % elongation: 7 MPa
- **Tear propagation resistance:** 25 N/mm (DIN 53507)
- **Abrasion:** 50 mm² (DIN 53516)
- **Compression set:** at +72 °C / 24 h: 18 %, at +23 °C / 72 h: 10 %
- **Rebound elasticity:** 45 %

Item	Thickness mm	Dimensions mm	Unit piece	Price EURO
300757	0.5	500 x 500	1	100.00
300758	1	500 x 500	1	111.00
300759	1.5	500 x 500	1	136.00
300760	2	500 x 500	1	156.00
300761	2.5	500 x 500	1	182.00
300762	3	500 x 500	1	197.00
300763	4	500 x 500	1	228.00
300764	5	500 x 500	1	259.00
300765	0.5	500 x 1,000	1	192.00
300766	1	1,000 x 1,000	1	118.00
300767	1.5	1,000 x 1,000	1	282.00
300768	2	1,000 x 1,000	1	305.00
300769	2.5	1,000 x 1,000	1	343.00
300770	3	1,000 x 1,000	1	361.00
300771	4	1,000 x 1,000	1	463.00
300772	5	1,000 x 1,000	1	576.00

Vulkollan®-Plate - Shore 82°

Application area

- Roller covering, drive and bearing elements, damping elements, coupling elements, spring elements, sealings

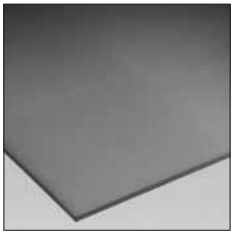
Product specification

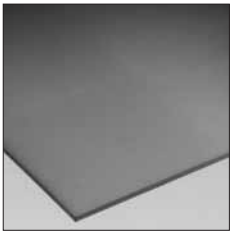
- High-performance polyurethane elastomer
- Constant elastomer quality due to closely specified quality control
- Excellent mechanical wear resistance
- Very good resistance to abrasion
- Remarkable elasticity over the complete hardness range
- Good tear propagation resistance
- High self-damping
- Low compression set
- Only relatively suitable for slipping functions
- Free of plasticizers
- Very good resistance to ozone, UV, and high-energy radiation
- Good resistance to weather and aging
- Good resistance to many oils, fats, petrols, and different solvents

Technical specification

- **Material:** PUR (Vulkollan® D 15); PUR (polyester polyol and naphthylene-1,5-diisocyanate (Desmodur 15) as well as with additional, special chain elongators
- **Colour:** natural
- **Shore hardness A:** 82° ±5° (DIN 53505)
- **Density:** 1.25 g/cm³ (DIN 53479)

- **Temperature range:** -15 to +80 °C
- **Tearing strength:** 46 MPa (DIN 53504)
- **Elongation at break:** 650 % (DIN 53504)
- **Tear propagation resistance:** 40 N/mm (DIN 53507)
- **Abrasion:** 32 mm^3 (DIN 53516)
- **Compression set:** 18 % at +70 °C / 24 h





Item	Thickness mm	Dimensions mm	Unit piece	Price EURO
300773	0.5	500 x 500	1	100.00
300774	1	500 x 500	1	111.00
300775	1.5	500 x 500	1	136.00
300776	2	500 x 500	1	156.00
300777	2.5	500 x 500	1	182.00
300778	3	500 x 500	1	197.00
300779	4	500 x 500	1	228.00
300780	5	500 x 500	1	259.00
300781	0.5	500 x 1,000	1	192.00
300782	1	1,000 x 1,000	1	118.00
300783	1.5	1,000 x 1,000	1	282.00
300784	2	1,000 x 1,000	1	305.00
300785	2.5	1,000 x 1,000	1	343.00
300786	3	1,000 x 1,000	1	361.00
300787	4	1,000 x 1,000	1	463.00
300788	5	1,000 x 1,000	1	576.00

Vulkollan®-Plate - Shore 90°

Application area

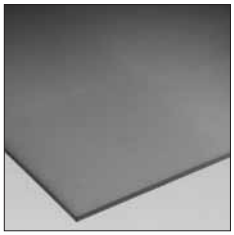
- Roller covering, drive and bearing elements, damping elements, coupling elements, spring elements, sealings

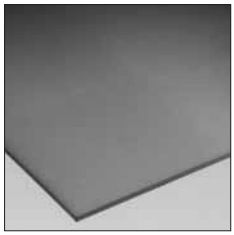
Product specification

- High-performance polyurethane elastomer
- Constant elastomer quality due to closely specified quality control
- Excellent mechanical wear resistance
- Very good resistance to abrasion
- Remarkable elasticity over the complete hardness range
- Good tear propagation resistance
- High self-damping
- Low compression set
- Only relatively suitable for slipping functions
- Free of plasticizers
- Very good resistance to ozone, UV, and high-energy radiation
- Good resistance to weather and aging
- Good resistance to many oils, fats, petrols, and different solvents

Technical specification

- **Material:** PUR (Vulkollan® D 15); PUR (polyester polyol and naphthylene-1,5-diisocyanate (Desmodur 15) as well as with additional, special chain elongators
- **Colour:** natural
- **Shore hardness A:** 90° ±5° (DIN 53505)
- **Density:** 1.26 g/cm^3 (DIN 53479)
- **Temperature range:** -25 to +80 °C
- **Tearing strength:** 40 MPa (DIN 53504)
- **Elongation at break:** 660 % (DIN 53504)
- **Tension:**
  at 100 % elongation: 8 MPa
  at 300 % elongation: 16 MPa
- **Tear propagation resistance:** 55 N/mm (DIN 53507)
- **Abrasion:** 32 mm^2 (DIN 53516)
- **Compression set:**
  at +70 °C / 24 h: 20 %
  at +23 °C / 72 h: 12 %
- **Rebound elasticity:** 55 %





Item	Thickness mm	Dimensions mm	Unit piece	Price EURO
300789	0.5	500 x 500	1	105.00
300790	1	500 x 500	1	119.00
300791	1.5	500 x 500	1	146.00
300792	2	500 x 500	1	167.00
300793	2.5	500 x 500	1	187.00
300794	3	500 x 500	1	202.00
300795	4	500 x 500	1	238.00
300796	5	500 x 500	1	264.00
300797	0.5	500 x 1,000	1	126.00
300798	1	1,000 x 1,000	1	218.00
300799	1.5	1,000 x 1,000	1	251.00
300800	2	1,000 x 1,000	1	284.00
300801	2.5	1,000 x 1,000	1	323.00
300802	3	1,000 x 1,000	1	364.00
300803	4	1,000 x 1,000	1	476.00
300804	5	1,000 x 1,000	1	591.00

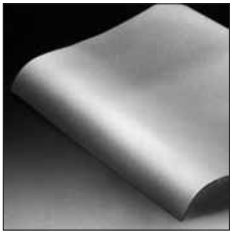
THOMAPLAST®-PVC Plate - Shore 70°

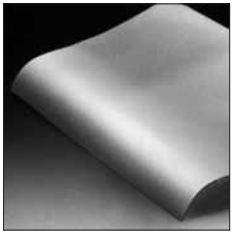
Product specification

- Good resistance to aging
- Good mechanical stability, plasticized and flexible
- Good dielectrical properties
- Low tearing strength
- Antiadhesive surface
- Moderate flame-resistance
- Low temperature resistance
- Limited resistance to oils, acids and alkalis
- Not stable to petrol and its derivatives

Technical specification

- **Material:** PVC (polyvinyl chloride)
- **Colour:** natural
- **Shore hardness A:** 70° ±5° (DIN 53505)
- **Temperature range:** -35 to +50 °C
- **Density:** 1.4 g/cm³
- **Elongation at break:** 350 %
- **Tearing strength:** 7.0 MPa
- **Insert:** none
- **Special features:** sulfur-free
- **Tolerance:** DIN ISO 3302-1 E2





Item	Thickness mm	Dimensions mm	Unit piece	Price EURO
19924	1	700 x 700	1	61.00
19925	1.5	700 x 700	1	68.00
19926	2	700 x 700	1	72.00
19927	2.5	700 x 700	1	79.00
19928	3	700 x 700	1	83.00
19929	4	700 x 700	1	94.00
19930	5	700 x 700	1	112.00
19931	6	700 x 700	1	122.00
19932	1	1.400 x 1.400	1	101.00
19933	1.5	1.400 x 1.400	1	112.00
19934	2	1.400 x 1.400	1	123.00
19935	2.5	1.400 x 1.400	1	143.00
19936	3	1.400 x 1.400	1	150.00
19937	4	1.400 x 1.400	1	167.00
19938	5	1.400 x 1.400	1	194.00
19939	6	1.400 x 1.400	1	224.00

THOMAPLAST®-PVC Plate - Shore 80°

Product specification

- Good resistance to aging
- Very good mechanical stability
- Good dielectrical properties
- Good tearing strength
- Antiadhesive surface
- Moderate flame-resistance
- Good temperature resistance
- Limited resistance to acids and alkalis
- Not stable to petrol and oil

Technical specification

- **Material:** PVC (polyvinyl chloride)
- **Colour:** crystal-clear
- **Shore hardness A:** 80° ±5° (DIN 53505)
- **Temperature range:** -30 to +50 °C
- **Density:** 1.23 g/cm³
- **Elongation at break:** 340 %
- **Tearing strength:** 20 MPa
- **Water absorption:** 0.8 % (DIN 53495)
- **Dielectric strength:** 25 KV/mm (DIN 53481)
- **Insert:** none
- **Special features:** UV-resistant
- **Tolerance:** DIN ISO 3302-1 E2

Item	Thickness mm	Dimensions mm	Unit piece	Price EURO
19940	0.5	600 x 500	1	65.00
19941	1	600 x 500	1	72.00
19942	1.5	600 x 500	1	76.00
19943	2	600 x 500	1	79.00
19944	2.5	600 x 500	1	83.00
19945	3	600 x 500	1	86.00
19946	4	600 x 500	1	90.00
19947	5	600 x 500	1	99.00
19948	6	600 x 500	1	106.00
19949	0.5	1.500 x 1,200	1	106.00
19950	1	1.500 x 1,200	1	130.00
19951	1.5	1.500 x 1,200	1	132.00
19952	2	1.500 x 1,200	1	150.00
19953	2.5	1.500 x 1,200	1	162.00
19954	3	1.500 x 1,200	1	171.00
19955	4	1.500 x 1,200	1	193.00
19956	5	1.500 x 1,200	1	206.00
19957	6	1.500 x 1,200	1	242.00

THOMAPLAST®-SBR Plate - Shore 50°

Product specification

- Medium tearing strength
- Very good impact elasticity
- Very good elastic behavior
- Outstanding abrasion resistance
- High cohesive friction
- Good resistance to aging
- Limited resistance to alkalis
- Not resistant to mineral oils, solvents, fuels, and acids
- Chemical features:
  SBR is a synthetic rubber with properties similar to natural rubber. Copolymers made of SBR base on butadiene rubber and have a styrene content of 10 % to 35 %. With increasing styrene component, the properties of SBR change to limited elasticity.

Technical specification
- **Material:** SBR (styrene-butadiene rubber)
- **Colour:** black
- **Shore hardness A:** 50° ±5° (DIN 53505)
- **Temperature range:** -30 to +70 °C
- **Density:** 1.4 g/cm^3
- **Elongation at break:** 300 %
- **Tearing strength:** 3 MPa
- **Insert:** none
- **Tolerance:** DIN ISO 3302-1 E2

Item	Thickness mm	Dimensions mm	Unit piece	Price EURO
19730	1	600 x 600	1	54.00
19731	1.5	600 x 600	1	58.00
19732	2	600 x 600	1	61.00
19733	2.5	600 x 600	1	66.00
19734	3	600 x 600	1	68.00
19735	4	600 x 600	1	76.00
19736	5	600 x 600	1	79.00
19737	6	600 x 600	1	86.00
19738	1	1,200 x 1,200	1	83.00
19739	1.5	1,200 x 1,200	1	100.00
19740	2	1,200 x 1,200	1	104.00
19741	2.5	1,200 x 1,200	1	110.00
19742	3	1,200 x 1,200	1	117.00
19743	4	1,200 x 1,200	1	137.00
19744	5	1,200 x 1,200	1	140.00
19745	6	1,200 x 1,200	1	151.00
301016	8	250 x 350	1	121.00
301017	10	250 x 350	1	136.00
301018	12	250 x 350	1	146.00
301025	8	500 x 700	1	210.00
301026	10	500 x 700	1	223.00
301027	12	500 x 700	1	248.00

THOMAPLAST®-SBR Plate - Shore 70°

Product specification
- Limited tearing strength, medium impact elasticity
- Good elastic behavior, good abrasion resistance
- Medium cohesive friction
- Good resistance to aging
- Chemical features:
  SBR is a synthetic rubber with properties similar to natural rubber. Copolymers made of SBR base on butadiene rubber and have a styrene content of 10 % to 35 %. With increasing styrene component, the properties of SBR change to limited elasticity.
  SBR is often mixed with NR, an ideal material symbiosis making use of the outstanding elastic behavior of NR.

Technical specification
- **Material:** SBR (styrene-butadiene rubber)
- **Colour:** black
- **Shore hardness A:** 70° ±10° (DIN 53505)
- **Temperature range:** -30 to +70 °C
- **Density:** 1.45 g/cm^3
- **Tearing strength:** 4 MPa (DIN 53504)
- **Elongation at break:** 150 % (DIN 53504)
- **Abrasion:** 300 mm^2 (DIN 53516)
- **Insert:** none
- **Tolerance:** DIN ISO 3302-1 E2

Item	Thickness mm	Dimensions mm	Unit piece	Price EURO
19763	1	600 x 600	1	50.00
19764	1.5	600 x 600	1	50.00
19765	2	600 x 600	1	50.00
19766	2.5	600 x 600	1	53.00
19767	3	600 x 600	1	56.00
19768	4	600 x 600	1	59.00
19769	5	600 x 600	1	62.00
19770	6	600 x 600	1	65.00
19771	8	600 x 600	1	86.00
19772	10	600 x 600	1	94.00
19774	1	1,200 x 1,200	1	86.00
19775	1.5	1,200 x 1,200	1	86.00
19776	2	1,200 x 1,200	1	86.00
19777	2.5	1,200 x 1,200	1	86.00
19778	3	1,200 x 1,200	1	90.00
19779	4	1,200 x 1,200	1	97.00
19780	5	1,200 x 1,200	1	110.00
19781	6	1,200 x 1,200	1	113.00
19782	8	1,200 x 1,200	1	145.00
19783	10	1,200 x 1,200	1	166.00

THOMAPLAST®-SBR Plate - Shore 85°

Product specification
- Very high abrasion resistance
- Medium elastic behavior
- Low tearing strength
- Good resistance to weather
- Poor resistance to mineral oils, fuels, solvents, acids, and alkalis
- Chemical features:
  SBR is a synthetic rubber with properties similar to natural rubber. Copolymers made of SBR base on butadiene rubber and have a styrene content of 10 % to 35 %. With increasing styrene component, the properties of SBR change to limited elasticity.

Technical specification
- **Material:** SBR (styrene-butadiene rubber)
- **Colour:** black
- **Shore hardness A:** 85° ±5° (DIN 53505)
- **Temperature range:** -30 to +70 °C
- **Density:** 1.6 g/cm^3
- **Elongation at break:** 100 %
- **Tearing strength:** 3 MPa
- **Compression set:** 21 % at +23 °C / 72 h
- **Insert:** none
- **Tolerance:** DIN ISO 3302-1 E2

Item	Thickness mm	Dimensions mm	Unit piece	Price EURO
19804	1	600 x 600	1	51.00
19805	1.5	600 x 600	1	54.00
19806	2	600 x 600	1	58.00
19807	3	600 x 600	1	61.00
19808	4	600 x 600	1	68.00
19809	5	600 x 600	1	72.00
19810	6	600 x 600	1	79.00
19811	1	1,200 x 1,200	1	78.00
19812	1.5	1,200 x 1,200	1	86.00
19813	2	1,200 x 1,200	1	95.00
19814	3	1,200 x 1,200	1	101.00
19815	4	1,200 x 1,200	1	107.00
19816	5	1,200 x 1,200	1	124.00
19817	6	1,200 x 1,200	1	138.00

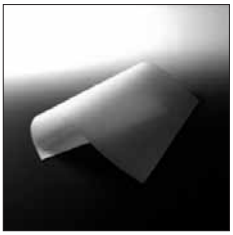
THOMAPLAST®-SBR Food Plate - Shore 65°

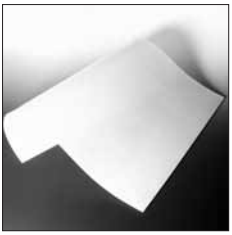
Product specification

- Food quality
- Very high tearing strength
- Outstanding elongation at break
- Very good impact elasticity
- Good elastic behavior
- Outstanding abrasion resistance
- High cohesive friction
- Good resistance to aging
- Good resistance to acids and alkalis
- Not resistant to mineral oils, solvents, and fuels
- Chemical features:
  SBR is a synthetic rubber with properties similar to natural rubber. Copolymers made of SBR base on butadiene rubber and have a styrene content of 10 % to 35 %. With increasing styrene component, the properties of SBR change to limited elasticity.
  SBR is often mixed with NR, an ideal material symbiosis making use of the outstanding elastic behavior of NR.

Technical specification

- **Material:** SBR (styrene-butadiene rubber)
- **Colour:** white
- **Shore hardness A:** 65° ±5° (DIN 53505)
- **Temperature range:** -30 to +70 °C
- **Density:** 1.43 g/cm^3
- **Specific features:** low-sulfur
- **Elongation at break:** 380 %
- **Tearing strength:** 8 MPa
- **Compression set:** 40 % at +70 °C / 22 h
- **Insert:** none
- **Regulations:** KTW-approval (approved for drinking water, food quality)



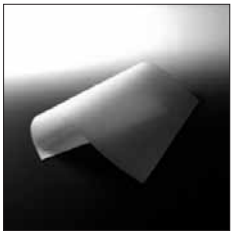


Item	Thickness mm	Dimensions mm	Unit piece	Price EURO
19746	1	700 x 700	1	61.00
19747	1.5	700 x 700	1	75.00
19748	2	700 x 700	1	79.00
19749	2.5	700 x 700	1	86.00
19750	3	700 x 700	1	89.00
19751	4	700 x 700	1	108.00
19752	5	700 x 700	1	122.00
19753	6	700 x 700	1	132.00
19754	1	1.400 x 1.400	1	152.00
19755	1.5	1.400 x 1.400	1	134.00
19756	2	1.400 x 1.400	1	142.00
19757	2.5	1.400 x 1.400	1	151.00
19758	3	1.400 x 1.400	1	159.00
19759	4	1.400 x 1.400	1	194.00
19760	5	1.400 x 1.400	1	229.00
19761	6	1.400 x 1.400	1	262.00

THOMAPLAST®-Silicone Plate - Shore 55°

Technical specification

- **Material:** silicone (silicone rubber)
- **Colour:** transparent
- **Shore hardness A:** 55° ±5° (DIN 53505)
- **Temperature range:** -60 to +200 °C, for a short time +260 °C
- **Specific features:** relatively resistant to most organic solvents, chemically neutral, non-toxic, ozone-resistant, physiologically safe



Item	Thickness mm	Dimensions mm	Unit piece	Price EURO
40265	1	600 x 550	1	108.00
40266	2	600 x 550	1	153.00
40267	3	600 x 550	1	208.00
40268	4	600 x 550	1	236.00
40269	5	600 x 550	1	260.00

THOMAPLAST®-Silicone Plate - Shore 60°

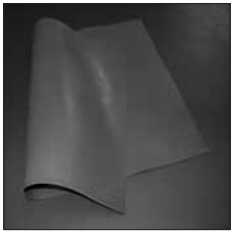
Product specification

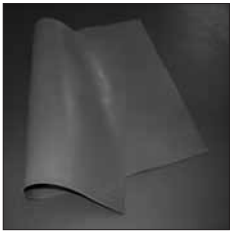
- Very good resistance to aging and weather
- Extremely high temperature resistance
- Excellent resistance to heat and hot air
- Very good flexibility in cold
- Sulfur-free
- Very good dielectrical properties
- Highest gas permeability
- Antiadhesive (repellent) surface
- Good elastic properties with optimal elongation at break

- Moderate mechanical stability
- Mean tearing strength
- Good chemical resistance to weak acids and alkalis as well as vegetable and animal oils, and glycols.
- Limited chemical resistance to petrol, mineral oils, and solvents (swelling).
- Chemical features:
  Modifying the SI basic type with vinyl groups produces a silicone rubber modification (methyl vinyl silicone quality) with improved properties.
  Improvement of flexibility in the cold (up to -100 °C) is achieved by modification with phenyl groups.
  The superior physiological properties allow the production of sterile parts for medical engineering and components for food processing technology.
  In the long-term experiment a slight hardening occurs at dry heat.

Technical specification

- **Material:** silicone (silicone rubber)
- **Colour:** red-brown
- **Shore hardness A:** 60° ±5° (DIN 53505)
- **Temperature range:** -60 to +230 °C
- **Density:** 1.18 g/cm^3
- **Elongation at break:** 250 % (DIN 53504)
- **Tearing strength:** 5 MPa (DIN 53504)
- **Compression set:** 30 % at +150 °C / 24 h
- **Insert:** none
- **Tolerance:** DIN ISO 3302-1 E2





Item	Thickness mm	Dimensions mm	Unit piece	Price EURO
333891	0.3	500 x 500	1	78.00
19848	0.5	600 x 600	1	102.00
19849	1	600 x 600	1	112.00
19850	1.5	600 x 600	1	144.00
19851	2	600 x 600	1	158.00
19852	3	600 x 600	1	197.00
19853	4	600 x 600	1	230.00
19854	5	600 x 600	1	255.00
19855	6	600 x 600	1	298.00
333892	0.3	1,000 x 1,200	1	129.00
19856	0.5	1,000 x 1,200	1	188.00
19857	1	1,000 x 1,200	1	225.00
19858	1.5	1,000 x 1,200	1	277.00
19859	2	1,000 x 1,200	1	303.00
19860	3	1,000 x 1,200	1	395.00
19861	4	1,000 x 1,200	1	448.00
19862	5	1,000 x 1,200	1	506.00
19863	6	1,000 x 1,200	1	603.00

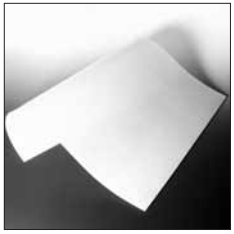
THOMAPLAST®-Silicone Food Plate - Shore 40°

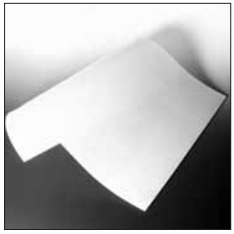
Product specification

- Suitable for food
- Very good resistance to aging and weather
- Very good resistance to ozone and oxygen
- Outstanding temperature resistance
- Sulfur-free
- Excellent resistance to heat and hot air
- Very good flexibility in cold
- Very good dielectrical properties
- Highest gas permeability
- Very good physiological properties (suitable for food)
- Antiadhesive (repellent) surface
- Outstanding elastic properties with optimal elongation at break
- Moderate mechanical stability
- Mean tearing strength
- Good chemical resistance to weak acids and alkalis as well as vegetable and animal oils, and glycols.
- Limited chemical resistance to petrol, mineral oils, and solvents (swelling).
- Chemical features:
  Modifying the SI basic type with vinyl groups produces a silicone rubber modification (methyl vinyl silicone quality) with improved properties.
  Improvement of flexibility in the cold (up to -100 °C) is achieved by modification with phenyl groups.
  The superior physiological properties allow the production of sterile parts for medical engineering and components for food processing technology.
  In the long-term experiment a slight hardening occurs at dry heat.

Technical specification

- **Material:** silicone (silicone rubber)
- **Colour:** transparent
- **Shore hardness A:** 40° ±5° (DIN 53505)
- **Temperature range:** -60 to +200 °C
- **Density:** 1.15 g/cm^3
- **Elongation at break:** 350 %
- **Tearing strength:** 5 MPa
- **Compression set:** 50 % at +150 °C / 70 h
- **Insert:** none
- **Tolerance:** DIN ISO 3302-1 E2
- **Regulations:** FDA §177.2600





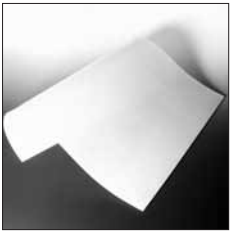
Item	Thickness mm	Dimensions mm	Unit piece	Price EURO
333767	0.5	500 x 500	1	185.00
19864	1	500 x 500	1	108.00
19865	1.5	500 x 500	1	129.00
19866	2	500 x 500	1	143.00
19867	3	500 x 500	1	172.00
19868	4	500 x 500	1	203.00

Item	Thickness mm	Dimensions mm	Unit piece	Price EURO
19869	5	500 x 500	1	224.00
333768	0.5	1,000 x 1,000	1	250.00
19871	1	1,000 x 1,000	1	207.00
19872	1.5	1,000 x 1,000	1	238.00
19873	2	1,000 x 1,000	1	264.00
19874	3	1,000 x 1,000	1	326.00
19875	4	1,000 x 1,000	1	385.00
19876	5	1,000 x 1,000	1	423.00

THOMAPLAST®-Silicone Food Plate - Shore 60°

Product specification

- Suitable for food
- Very good resistance to aging and weather, to ozone and oxygen
- Sulfur-free
- Outstanding temperature resistance
- Excellent resistance to heat and hot air
- Very good flexibility in cold, dielectrical properties
- Highest gas permeability
- Very good physiological properties
- Antiadhesive (repellent) surface
- Outstanding elastic properties with optimal elongation at break
- Moderate mechanical stability
- Mean tearing strength
- Good chemical resistance to weak acids and alkalis as well as vegetable and animal oils, and glycols.
- Limited chemical resistance to petrol, mineral oils, and solvents (swelling).
- Chemical features:
  Modifying the SI basic type with vinyl groups produces a silicone rubber modification (methyl vinyl silicone quality) with improved properties.
  Improvement of flexibility in the cold (up to -100 °C) is achieved by modification with phenyl groups.
  The superior physiological properties allow the production of sterile parts for medical engineering and components for food processing technology.
  In the long-term experiment a slight hardening occurs at dry heat.



Technical specification

- **Material:** silicone (silicone rubber)
- **Colour:** translucent
- **Shore hardness A:** 60° ±5° (DIN 53505)
- **Temperature range:** -60 to +200 °C
- **Density:** 1.15 g/cm^3
- **Elongation at break:** 350 %
- **Tearing strength:** 5 MPa
- **Compression set:** 50 % at +150 °C / 70 h
- **Volume resistivity:** 10^{15} Ohm x cm
- **Insert:** none
- **Tolerance:** DIN ISO 3302-1 E2
- **Regulations:** FDA §177.2600, USP XXI, DAB 10, BfR XV

Item	Thickness mm	Dimensions mm	Unit piece	Price EURO
333893	0.3	500 x 500	1	86.00
19878	0.5	600 x 600	1	112.00
19879	1	600 x 600	1	135.00
19880	1.5	600 x 600	1	148.00
19881	2	600 x 600	1	170.00
19882	3	600 x 600	1	218.00
19883	4	600 x 600	1	253.00
19884	5	600 x 600	1	286.00
19885	6	600 x 600	1	299.00
333894	0.3	1,000 x 1,200	1	144.00
19886	0.5	1,200 x 1,200	1	195.00
19887	1	1,200 x 1,200	1	254.00
19888	1.5	1,200 x 1,200	1	289.00
19889	2	1,200 x 1,200	1	337.00
19890	3	1,200 x 1,200	1	446.00
19891	4	1,200 x 1,200	1	497.00
19892	5	1,200 x 1,200	1	574.00
19893	6	1,200 x 1,200	1	664.00

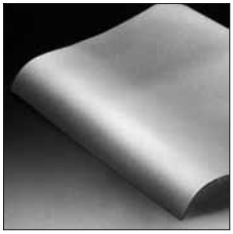
THOMAPLAST®-Silicone Sheet (High-Temperature) - Shore 60°

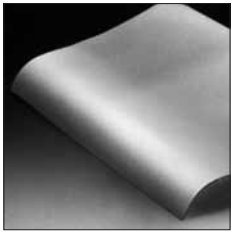
Product specification

- Outstanding temperature resistance
- Excellent resistance to hot air
- Very good flexibility in cold
- Very good resistance to ozone, aging, and weather
- Good elastic behavior
- Antiadhesive (repellent) surface
- Good chemical resistance (individual testing recommended)

Technical specification

- **Material:** silicone (silicone rubber)
- **Colour:** grey
- **Shore hardness A:** 60° ±5°
- **Density:** 1.16 ±0.03 g/cm^3 (DIN 53479)
- **Temperature range:** -50 to +250 °C, for a short time +300 °C
- **Sterilization:** hot air (+200 °C), steam (+136 °C)
- **Tensile strength:** >4.0 MPa
- **Elongation at break:** >190 % (DIN 53504-S2)
- **Tolerance:** ISO 3302 M2





Item	Thickness mm	Dimensions mm	Unit piece	Price EURO
19169	8	500 x 500	1	225.00
19171	10	500 x 500	1	266.00

THOMAPLAST®-Silicone Sheet with Glass Fabric Insert - Shore 60°

Application area
- Sealing technology, insulation technology, damping technology, electrical engineering, heating engineering, industrial engineering

Product specification
- Outstanding temperature resistance
- Excellent resistance to hot air
- Very good flexibility in cold
- Very good resistance to ozone, aging, and weather

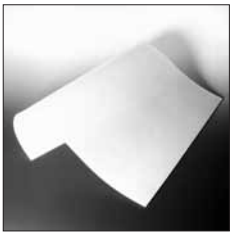
Technical specification
- **Material:** silicone (silicone rubber)
- **Colour:** red-brown
- **Shore hardness A:** 60° ±5°
- **Design:** with glass fabric insert, type V3-52-A
- **Temperature range:** -50 to +200 °C
- **Sterilization:** hot air (+200 °C), steam (+136 °C)
- **Tolerance:** ISO 3302.1-ST2

Item	Thickness mm	Dimensions mm	Unit piece	Price EURO
340373	3	1,200 x 500	1	180.00
340374	3	1,200 x 1,000	1	324.00
340375	3	1,200 x 3.000	1	582.00

THOMAPLAST®-Silicone Sheet with PTFE Coat

Product specification
- Solidly bonded two-sheet-combination made of silicone and PTFE.
- Ideal for punching of sealings for chromatography, biotechnology, fermentation as well as for pharmaceutical packaging industry.

Technical specification
- **Material:** silicone (silicone rubber), PTFE (polytetrafluoroethylene)
- **Colour SI:** red
- **Colour PTFE:** white
- **Shore hardness A:** 50° ±5° (DIN 53505)
- **Temperature range:** -60 to +180 °C
- **Thickness of PTFE coating:** 0.2 mm
- **Tolerance:** ISO 3302 M2



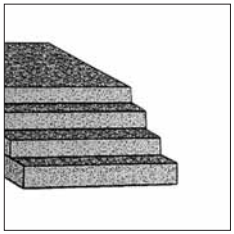
Item	Thickness of carrier layer mm	Thickness of coating mm	Dimensions mm	Price EURO
19181	1.3	0.1	300 x 425	164.00
19182	1.5	0.2	300 x 210	103.00
81270	2	0.2	150 x 150	49.00
81266	2	0.2	300 x 300	113.00
81271	3	0.2	150 x 150	57.00
19186	3	0.2	300 x 210	141.00
81267	3	0.2	300 x 300	133.00
19185	3	0.2	300 x 420	228.00
81272	4	0.2	150 x 150	67.00
81268	4	0.2	300 x 300	149.00

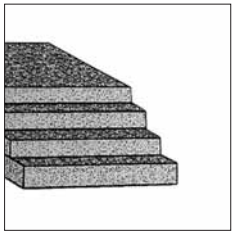
Foam Rubbers

THOMAPLAST®-Foam Rubber Sheet made of CR - without skin

Product specification
- Remarkable temperature resistance, also for a short time
- Excellent resistance to weather, aging, and ozone
- Good mechanical stability
- High flame resistance

Technical specification
- **Material:** CR (chloroprene rubber)
- **Colour:** black
- **Shore hardness A:** 15° ±3° (DIN 53505)
- **Temperature range:** -40 to +110 °C
- **Elongation:** 450 - 600 %
- **Density:** 600 - 1,000 kg/m³
- **Compression set:** at +23 °C / 72 h: approx. 10 %, at +70 °C / 22 h: approx. 22 %
- **Compressibility:** 150 ±60 kPa at 25 % deformation
- **Inflammability:** self-extinguishing
- **Design:** without skin on both sides, but closed-cell and mixed-cell





Item	Thickness mm	Tolerance mm	Dimensions mm	Unit piece	Price EURO
332210	2	±0.5	250 x 250	1	66.00
332211	2	±0.5	500 x 500	1	130.00
332212	2	±0.5	1,000 x 1,000	1	260.00
332213	3	±0.6	250 x 250	1	70.00
332214	3	±0.6	500 x 500	1	142.00
332215	3	±0.6	1,000 x 1,000	1	286.00
332216	5	±0.7	250 x 250	1	82.00

Item	Thickness mm	Tolerance mm	Dimensions mm	Unit piece	Price EURO
332217	5	±0.7	500 x 500	1	162.00
332218	5	±0.7	1,000 x 1,000	1	324.00
332219	8	±0.8	250 x 250	1	88.00
332220	8	±0.8	500 x 500	1	178.00
3322211	8	±0.8	1,000 x 1,000	1	356.00

THOMAPLAST®-Foam Rubber Sheet made of CR - with skin

Product specification

- Excellent resistance to weather, aging, and ozone
- Remarkable temperature resistance, also for a short time!
- Good mechanical stability
- High flame resistance

Technical specification

- **Material:** CR (chloroprene rubber)
- **Colour:** light-beige
- **Temperature range:** -40 to +110 °C, for a short time +140 °C
- **Density:** 700 to 1000 kg/m³
- **Compression set:** at +20 °C: approx. 10 % (DIN 53572), at +70 °C: approx. 22 % (DIN 53572)
- **Applied pressure at load 1 kP/cm2:** approx. 25 - 35 %
- **Inflammability:** self-extinguishing
- **Design:** with skin on both sides and fine pattern, but open-pored

Item	Thickness mm	Tolerance mm	Dimensions mm	Unit piece	Price EURO
332105	2	±0.5	250 x 250	1	66.00
332106	2	±0.5	500 x 500	1	130.00
332107	2	±0.5	1,000 x 1,000	1	260.00
332108	3	±0.5	250 x 250	1	70.00
332109	3	±0.5	500 x 500	1	142.00
332110	3	±0.5	1,000 x 1,000	1	286.00
332111	4	±0.6	250 x 250	1	72.00
332112	4	±0.6	500 x 500	1	146.00
332113	4	±0.6	1,000 x 1,000	1	294.00
332114	5	±0.7	250 x 250	1	76.00
332115	5	±0.7	500 x 500	1	154.00
332116	5	±0.7	1,000 x 1,000	1	310.00
332117	6	±0.7	250 x 250	1	84.00
332118	6	±0.7	500 x 500	1	168.00
332119	6	±0.7	1,000 x 1,000	1	336.00
332120	8	±0.8	250 x 250	1	84.00
332121	8	±0.8	500 x 500	1	170.00
332122	8	±0.8	1,000 x 1,000	1	342.00
332123	10	±0.8	250 x 250	1	86.00
332124	10	±0.8	500 x 500	1	174.00
332125	10	±0.8	1,000 x 1,000	1	348.00
332126	12	±0.9	250 x 250	1	90.00
332127	12	±0.9	500 x 500	1	180.00
332128	12	±0.9	1,000 x 1,000	1	362.00
332129	15	±1.0	250 x 250	1	96.00
332130	15	±1.0	500 x 500	1	192.00
332131	15	±1.0	1,000 x 1,000	1	382.00
332132	20	±1.0	250 x 250	1	106.00
332133	20	±1.0	500 x 500	1	212.00
332134	20	±1.0	1,000 x 1,000	1	424.00

THOMAPLAST®-Foam Rubber Sheet made of EPDM

Product specification

- Cell structure closed-cell
- Without skin on both sides
- Very good volume compression
- Remarkable deformability
- Very good resistance to weather and aging
- Very good cold and thermal resistance
- Good chemical resistance to many alkalis, acids, and polar solvents; poor resistance to mineral oils

Technical specification

- **Material:** EPDM (ethylene-propylene-diene rubber)
- **Colour:** black
- **Temperature range:** -40 to +120 °C
- **Density:** 0.14 g/cm³
- **Thickness tolerance:** DIN 7715 T5 P3
- **Design:** closed-cell, without skin

Item	Thickness mm	Dimensions mm	Unit piece	Price EURO
300855	2	500 x 500	1	36.00
300856	3	500 x 500	1	47.00
300857	4	500 x 500	1	54.00
300858	5	500 x 500	1	59.00
300859	6	500 x 500	1	67.00
300860	8	500 x 500	1	77.00
300861	10	500 x 500	1	93.00
300862	15	500 x 500	1	110.00
300863	20	500 x 500	1	113.00
300864	30	500 x 500	1	139.00
300865	2	500 x 1,000	1	62.00
300866	3	500 x 1,000	1	80.00
300867	4	500 x 1,000	1	90.00
300868	5	500 x 1,000	1	100.00
300869	6	500 x 1,000	1	116.00
300870	8	500 x 1,000	1	139.00
300871	10	500 x 1,000	1	144.00
300872	15	500 x 1,000	1	156.00
300873	20	500 x 1,000	1	164.00
300874	30	500 x 1,000	1	185.00
300875	2	1,000 x 1,000	1	98.00
300876	3	1,000 x 1,000	1	123.00
300877	4	1,000 x 1,000	1	149.00
300878	5	1,000 x 1,000	1	164.00
300879	6	1,000 x 1,000	1	179.00
300880	8	1,000 x 1,000	1	192.00
300881	10	1,000 x 1,000	1	225.00
300882	15	1,000 x 1,000	1	277.00

Item	Thickness mm	Dimensions mm	Unit piece	Price EURO
300883	20	1,000 x 1,000	1	310.00
300884	30	1,000 x 1,000	1	389.00

THOMAPLAST®-High-Chem Foam Rubber Sheet made of FPM

Product specification

- High-grade copolymer of fluorinated hydrocarbons
- Cell structure with skin on all sides
- Very good chemical resistance to most organic and inorganic media
- Very good cold resistance
- Excellent heat resistance
- Excellent resistance to ozone, oxygen, aging, and weather
- Good flame resistance, self-extinguishing
- High mechanical stability
- Excellent deformation bridging
- Very long lifetime even at highest compression strain
- Gas-tight sealing already at low surface pressure

Technical specification

- **Material:** FPM (fluorinated rubber)
- **Colour:** black
- **Shore hardness A:** 25° ±5° (DIN 53505)
- **Temperature range:** -15 °C to +200 °C, for a short time +300 °C
- **Density:** 0.8 g/cm^3
- **Tension:** 0.9 N/mm^2 (DIN 53504)
- **Elongation at break:** 200 % (DIN 53504)
- **Change at heating:** -1.8 %
- **Design:** extruded sheets, with skin on all sides

Item	Thickness mm	Tolerance mm	Dimensions mm	Unit piece	Price EURO
301248	2		140 x 100	1	39.00
301249	2		140 x 500	1	86.00
301250	2		140 x 1,000	1	155.00
3012511	3	±0.7	100 x 100	1	45.00
301251	3	±0.7	100 x 300	1	95.00
301252	3	±0.7	150 x 500	1	115.00
301253	3	±0.7	150 x 1,000	1	180.00
301254	4	±0.7	150 x 100	1	106.00
301255	4	±0.7	150 x 500	1	212.00
301256	4	±0.7	150 x 1,000	1	399.00
301257	5	±0.8	150 x 100	1	131.00
301258	5	±0.8	300 x 300	1	262.00
301259	5	±0.8	150 x 1,000	1	574.00
3012601	6	±0.8	100 x 100	1	75.00
301260	6	±0.8	300 x 100	1	155.00
301261	6	±0.8	300 x 300	1	311.00
301262	6	±0.8	130 x 1,000	1	681.00
301263	8	±1.0	100 x 300	1	205.00
301264	8	±1.0	115 x 500	1	411.00
301265	8	±1.0	115 x 1,000	1	899.00

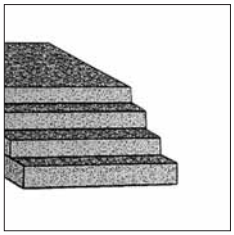
THOMAPLAST®-Foam Rubber Sheet made of NR

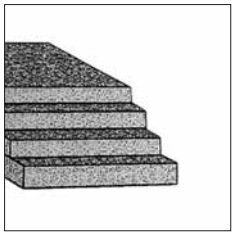
Product specification

- Very good elastic properties
- Very good deformability, combined with high volume compressibility
- High impact resilience
- High tearing strength
- Excellent abrasion resistance
- Limited resistance to acids and alkalis; poor resistance to mineral oils, fuels, and organic solvents
- Not resistant to weather and oils

Technical specification

- **Material:** NR (natural rubber)
- **Colour:** dark-grey
- **Density:** 550 - 850 kg/m^3
- **Temperature range:** -40 to +70 °C
- **Elongation at break:** 250 - 400 %
- **Compression set:** 15 % at +23 °C / 22 h / 25 % (DIN 53517)
- **Tolerance:** DIN ISO 3302-1 E3
- **Design:** mixed-cell, with closed skin, pattern on both sides





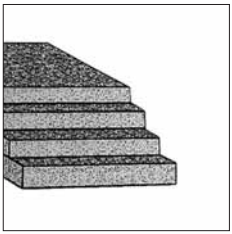
Item	Thickness mm	Tolerance mm	Dimensions mm	Unit piece	Price EURO
332168	2	±0.5	250 x 250	1	38.00
332169	2	±0.5	500 x 500	1	74.00
332170	2	±0.5	1,000 x 1,000	1	148.00
332171	2.5	±0.5	250 x 250	1	45.00
332172	2.5	±0.5	500 x 500	1	90.00
332173	2.5	±0.5	1,000 x 1,000	1	180.00
332174	3	±0.6	250 x 250	1	48.00
332175	3	±0.6	500 x 500	1	94.00
332176	3	±0.6	1,000 x 1,000	1	180.00
332177	4	±0.6	250 x 250	1	50.00
332178	4	±0.6	500 x 500	1	98.00
332179	4	±0.6	1,000 x 1,000	1	198.00
332180	5	±0.7	250 x 250	1	52.00
332181	5	±0.7	500 x 500	1	102.00
332182	5	±0.7	1,000 x 1,000	1	204.00
332183	6	±0.7	250 x 250	1	54.00
332184	6	±0.7	500 x 500	1	108.00
332185	6	±0.7	1,000 x 1,000	1	214.00
332186	8	±0.8	250 x 250	1	60.00

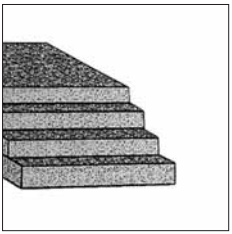
Item	Thickness mm	Tolerance mm	Dimensions mm	Unit piece	Price EURO
332187	8	±0.8	500 x 500	1	120.00
332188	8	±0.8	1,000 x 1,000	1	240.00
332189	10	±0.8	250 x 250	1	64.00
332190	10	±0.8	500 x 500	1	128.00
332191	10	±0.8	1,000 x 1,000	1	254.00
332192	12	±0.9	250 x 250	1	66.00
332193	12	±0.9	500 x 500	1	132.00
332194	12	±0.9	1,000 x 1,000	1	264.00
332195	15	±1.0	250 x 250	1	76.00
332196	15	±1.0	500 x 500	1	152.00
332197	15	±1.0	1,000 x 1,000	1	298.00
332198	20	±1.0	250 x 250	1	84.00
332199	20	±1.0	500 x 500	1	168.00
332200	20	±1.0	1,000 x 1,000	1	336.00
332201	25	±1.0	250 x 250	1	88.00
332202	25	±1.0	500 x 500	1	175.00
332203	25	±1.0	1,000 x 1,000	1	350.00
332204	30	±1.5	250 x 250	1	94.00
332205	30	±1.5	500 x 500	1	188.00
332206	30	±1.5	1,000 x 1,000	1	376.00
332207	40	±2.0	250 x 250	1	98.00
332208	40	±2.0	500 x 500	1	198.00
332209	40	±2.0	1,000 x 1,000	1	396.00

THOMAPLAST®-Foam Rubber Sheet made of PUR

Product specification

- Extremely high volume compressibility
- Good impact resilience and tear propagation resistance
- Good resistance to weather and aging
- Remarkable rebound elasticity
- Good elongation at break
- Good deformability
- Good resistance to gasoline and oil; limited resistance to alkalis, not recommended for acids





Technical specification

- **Material:** PUR (polyurethane, cellular, RG 350)
- **Colour:** light
- **Temperature range:** -20 to +80 °C
- **Density:** 0.35 g/cm^3
- **Tear propagation resistance:** 8 kN/m (DIN 53515)
- **Compression set:** 2.5 % at +22 °C / 70 h
- **Impact resilience:** 60 % (DIN53512)
- **Elongation at break:** 390 % (DIN 53504)
- **Compressive stress:**
  at 20 %: 0.12 N/mm^2 (DIN 53504)
  at 30 %: 0.18 N/mm^2 (DIN 53504)
  at 40 %: 0.25 N/mm^2 (DIN 53504)
  at 50 %: 0.38 N/mm^2 (DIN 53504)
  at 60 %: 0.62 N/mm^2 (DIN 53504)
  at 70 %: 1.17 N/mm^2 (DIN 53504)
- **Fire protection class:** B2, normally inflammable (DIN 4102)

Item	Thickness mm	Tolerance mm	Dimensions mm	Unit piece	Price EURO
332286	1	±0.2	250 x 250	1	54.00
332287	1	±0.2	250 x 500	1	96.00
332288	2	±0.5	250 x 250	1	64.00
332289	2	±0.5	250 x 500	1	120.00
332290	2.5	±0.5	250 x 250	1	66.00
332291	2.5	±0.5	250 x 500	1	130.00
332292	3	±0.6	250 x 250	1	72.00
332293	3	±0.6	250 x 500	1	138.00
332294	4	±0.6	250 x 250	1	78.00
332295	4	±0.6	250 x 500	1	152.00
332296	5	±0.7	250 x 250	1	88.00
332297	5	±0.7	250 x 500	1	172.00
332298	6	±0.7	250 x 250	1	94.00
332299	6	±0.7	250 x 500	1	184.00
332300	8	±0.8	250 x 250	1	98.00
332301	8	±0.8	250 x 500	1	192.00
332302	10	±0.8	250 x 250	1	112.00
332303	10	±0.8	250 x 500	1	216.00

THOMAPLAST®-Spring Elements made of PUR (cellular)

Application area

- Attenuation layer with large deflection
- Permanently elastic intermediate layer for sandwich constructions
- Spring elements, buffer, damping elements in the shop, in the laboratory, pilot plant, and factory

General product specification

- High tensile strength and notch impact strength
- Extremely high volume compressibility
- High tearing strength
- Good behavior in cold
- Good resistance to aging and weather
- Low compression set
- Good oil resistance, limited resistance to gasoline, not recommended to acids and bases
- This quality is a microcellular polyurethane elastomer. The cell structure is formed in the foaming process without blowing agent, free of pollutants.
- All conventional elastomers are not volume compressible and have to be built in in such a way that an unlimited deformation to the side is possible at deflection. If this is not guaranteed, only very limited spring deflections can be realized.
- The material cannot be defined using the shore hardness A. In this case, the differentiation is made by density.

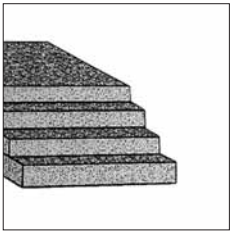
General technical specification

- **Material:** PUR (cellular polyurethane elastomer)
- **Temperature range:** -20 to +60 °C
- **Density:** 0.35 g/cm^3 or 0.45 g/cm^3 or 0.55 g/cm^3
- **Specific features:** free of asbestos
- **Flammability rating:** normal flammability, class 2

THOMAPLAST®-Spring Element Plate made of PUR (cellular) - low density

Technical specification

- **Material:** PUR (cellular polyurethane elastomer)
- **Density:** 0.35 g/cm³ (DIN EN ISO 845)
- **Tensile strength:** >3.0 N/mm² (DIN EN ISO 1798)
- **Elongation at break:** >330 % (DIN EN ISO 1798)
- **Compression set:** <7.0 % at +70 °C / 22 h / 50 % (DIN EN ISO 1856)



Item	Thick-ness mm	Tolerance mm	Spring deflection mm	Dimensions mm	Unit piece	Price EURO
302392	1	±0.4	0.35	250 x 250	1	34.00
302393	1	±0.4	0.35	250 x 500	1	51.00
302394	2	±0.4	0.7	250 x 250	1	50.00
302395	2	±0.4	0.7	250 x 500	1	76.00
302396	3	±0.5	1.05	250 x 250	1	66.00
302397	3	±0.5	1.05	250 x 500	1	104.00
302398	4	±0.5	1.4	250 x 250	1	79.00
302399	4	±0.5	1.4	250 x 500	1	124.00
302400	5	±0.5	1.75	250 x 250	1	95.00
302401	5	±0.5	1.75	250 x 500	1	150.00
302402	6	±0.6	2.1	250 x 250	1	107.00
302403	6	±0.6	2.1	250 x 500	1	166.00
302404	8	±0.6	2.8	250 x 250	1	131.00
302405	8	±0.6	2.8	250 x 500	1	201.00
302406	10	±0.6	3.5	250 x 250	1	148.00
302407	10	±0.6	3.5	250 x 500	1	221.00
302408	15	±0.8	5.25	250 x 250	1	191.00
302409	15	±0.8	5.25	250 x 500	1	271.00
302410	20	±1.0	7	250 x 250	1	208.00
302411	20	±1.0	7	250 x 500	1	297.00

THOMAPLAST®-Spring Element Plate made of PUR (cellular) - medium density

Technical specification

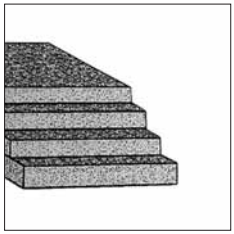
- **Material:** PUR (cellular polyurethane elastomer)
- **Density:** 0.45 g/cm³
- **Tensile strength:** >4.0 N/mm² (DIN 57571)
- **Elongation at break:** >400 % (DIN EN ISO 1798)
- **Tearing strength:** 12.0 N/mm (DIN 53515)
- **Rebound elasticity:** 55 % (DIN 53512)
- **Compression set:** 5.0 % at +70 °C / 22 h / 50 % (DIN 53572)

Item	Thick-ness mm	Tolerance mm	Spring deflection mm	Dimensions mm	Unit piece	Price EURO
302412	1	±0.4	0.35	250 x 250	1	35.00
302413	1	±0.4	0.35	250 x 500	1	56.00
302414	2	±0.4	0.7	250 x 250	1	55.00
302415	2	±0.4	0.7	250 x 500	1	88.00
302416	3	±0.5	1.05	250 x 250	1	78.00
302417	3	±0.5	1.05	250 x 500	1	125.00
302418	4	±0.5	1.4	250 x 250	1	99.00
302419	4	±0.5	1.4	250 x 500	1	155.00
302420	5	±0.5	1.75	250 x 250	1	113.00
302421	5	±0.5	1.75	250 x 500	1	176.00
302422	6	±0.6	2.1	250 x 250	1	131.00
302423	6	±0.6	2.1	250 x 500	1	200.00
302424	8	±0.6	2.8	250 x 250	1	160.00
302425	8	±0.6	2.8	250 x 500	1	234.00
302426	10	±0.8	3.5	250 x 250	1	169.00
302427	10	±0.8	3.5	250 x 500	1	241.00
302428	15	±0.8	5.25	250 x 250	1	230.00
302429	15	±0.8	5.25	250 x 500	1	319.00
302430	20	±1.0	7	250 x 250	1	277.00
302431	20	±1.0	7	250 x 500	1	369.00

THOMAPLAST®-Spring Element Plate made of PUR (cellular) - high-density

Technical specification

- **Material:** PUR (cellular polyurethane elastomer)
- **Density:** 0.65 g/cm³
- **Static load:** 0.92 N/mm²



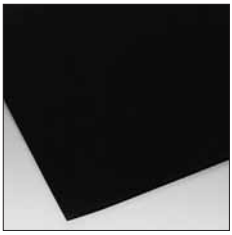
Item	Thick-ness mm	Tolerance mm	Spring deflection mm	Dimensions mm	Unit piece	Price EURO
302432	1	±0.4	0.35	250 x 250	1	42.00
302433	1	±0.4	0.35	250 x 500	1	68.00
302434	2	±0.4	0.7	250 x 250	1	67.00
302435	2	±0.4	0.7	250 x 500	1	107.00
302436	3	±0.5	1.05	250 x 250	1	92.00
302437	3	±0.5	1.05	250 x 500	1	145.00
302438	4	±0.5	1.4	250 x 250	1	116.00
302439	4	±0.5	1.4	250 x 500	1	178.00
302440	5	±0.5	1.75	250 x 250	1	142.00
302441	5	±0.5	1.75	250 x 500	1	219.00
302442	6	±0.6	2.1	250 x 250	1	150.00
302443	6	±0.6	2.1	250 x 500	1	224.00
302444	8	±0.6	2.8	250 x 250	1	180.00

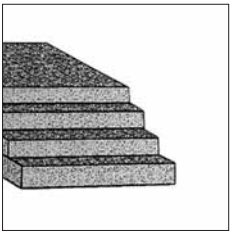
Item	Thick-ness mm	Tolerance mm	Spring deflection mm	Dimensions mm	Unit piece	Price EURO
302445	8	±0.6	2.8	250 x 500	1	265.00
302446	10	±0.8	3.5	250 x 250	1	200.00
302447	10	±0.8	3.5	250 x 500	1	277.00
302448	15	±0.8	5.25	250 x 250	1	278.00
302449	15	±0.8	5.25	250 x 500	1	368.00
302450	20	±1.0	7	250 x 250	1	332.00
302451	20	±1.0	7	250 x 500	1	423.00

THOMAPLAST®-Cellular Rubber Plate made of CR - Shore 15°

Product specification
- Good elastic properties
- Good abrasion resistance
- Good resistance to weather, aging, and ozone
- High flame resistance
- Chemically resistant to dilute acids, alkalis, and mineral oils

Technical specification
- **Material:** CR (chloroprene rubber)
- **Colour:** black
- **Shore hardness A:** 15° ±3° (DIN 53505)
- **Density:** 0.21 g/cm^3
- **Temperature range:** -30 to +100 °C
- **Thickness tolerance:** DIN 7715 T5 P3
- **Design:** foamed, closed-cell, without skin





Item	Thickness mm	Dimensions mm	Unit piece	Price EURO
300831	2	350 x 500	1	62.00
331615	2	700 x 500	1	72.00
331616	2	1,000 x 700	1	110.00
331617	2	1.400 x 1,000	1	170.00
300832	3	350 x 500	1	85.00
331618	3	700 x 500	1	86.00
331619	3	1,000 x 700	1	132.00
331620	3	1.400 x 1,000	1	202.00
300833	4	350 x 500	1	95.00
331621	4	700 x 500	1	92.00
331622	4	1,000 x 700	1	142.00
331623	4	1.400 x 1,000	1	220.00
300834	5	350 x 500	1	103.00
331624	5	700 x 500	1	106.00
331625	5	1,000 x 700	1	162.00
331626	5	1.400 x 1,000	1	248.00
300835	6	350 x 500	1	113.00
331627	6	700 x 500	1	112.00
331628	6	1,000 x 700	1	172.00
331629	6	1.400 x 1,000	1	264.00
300836	8	350 x 500	1	121.00
331630	8	700 x 500	1	122.00
331631	8	1,000 x 700	1	188.00
331632	8	1.400 x 1,000	1	288.00
300837	10	350 x 500	1	126.00
331633	10	700 x 500	1	132.00
331634	10	1,000 x 700	1	202.00
331635	10	1.400 x 1,000	1	308.00
300838	12	350 x 500	1	136.00
331636	12	700 x 500	1	148.00
331637	12	1,000 x 700	1	230.00
331638	12	1.400 x 1,000	1	332.00
300839	15	350 x 500	1	159.00
331639	15	700 x 500	1	162.00
331640	15	1,000 x 700	1	252.00
331641	15	1.400 x 1,000	1	388.00
300840	20	350 x 500	1	169.00
331642	20	700 x 500	1	192.00
331643	20	1,000 x 700	1	298.00
331644	20	1.400 x 1,000	1	460.00
300841	25	350 x 500	1	182.00
331645	25	700 x 500	1	210.00
331646	25	1,000 x 700	1	326.00
331647	25	1.400 x 1,000	1	504.00
300842	30	350 x 500	1	197.00
300854	30	700 x 500	1	282.00
301039	30.5	700 x 1,000	1	456.00

THOMAPLAST®-Cellular Rubber Plate made of CR/EPDM - Shore 40°

Product specification
- Resistance to aging and weather
- Resistance to ozone
- Good temperature resistance
- Very good mechanical stability
- High vacuum compressibility

Technical specification
- **Material:** CR (chloroprene rubber)
- **Additive components:** EPDM (ethylene-propylene-diene rubber)
- **Colour:** black
- **Shore hardness A:** 40° ±10° (DIN 53505)
- **Temperature range:** -40 to +80 °C, for a short time +100 °C
- **Density:** 175 kg/m^3
- **Elongation at break:** >150 %
- **Tensile strength:** >400 kPa (ISO 1798-97)
- **Tear strength:** >0.5 kN/m (ISO 34-1 (B-a) 94)
- **Dimensional stability:** 2 % after 3 h at +80 °C
- **Linear shrinkage:** 3 % after 7 days at +70 °C
- **Compression set:** at +23 °C / 22 h: 8 %, at +40 °C / 22 h: 23 %
- **Pressure resistance:** 35 - 63 kPa (ASTM D 1056-85)
- **Water absorption (vacuum):** 3.5 % (ASTM D 1056-80)
- **Design:** without skin on both sides, but closed-cell

Item	Thickness mm	Tolerance mm	Dimensions mm	Unit piece	Price EURO
332221	2	±0.5	250 x 250	1	30.00
332222	2	±0.5	500 x 500	1	52.00
332223	2	±0.5	1,000 x 1,000	1	96.00
332224	2.5	±0.5	250 x 250	1	32.00
332225	2.5	±0.5	500 x 500	1	56.00
332226	2.5	±0.5	1,000 x 1,000	1	102.00
332227	3	±0.6	250 x 250	1	34.00
332228	3	±0.6	500 x 500	1	62.00
332229	3	±0.6	1,000 x 1,000	1	110.00
332230	4	±0.7	250 x 250	1	40.00
332231	4	±0.7	500 x 500	1	70.00
332232	4	±0.7	1,000 x 1,000	1	126.00
332233	5	±0.7	250 x 250	1	44.00
332234	5	±0.7	500 x 500	1	80.00
332235	5	±0.7	1,000 x 1,000	1	146.00
332236	6	±0.7	250 x 250	1	50.00
332237	6	±0.7	500 x 500	1	92.00
332238	6	±0.7	1,000 x 1,000	1	168.00
332239	8	±0.8	250 x 250	1	58.00
332240	8	±0.8	500 x 500	1	98.00
332241	8	±0.8	2.000 x 1,000	1	180.00
332242	10	±0.8	250 x 250	1	62.00
332243	10	±0.8	500 x 500	1	112.00
332355	10	±0.8	1,000 x 1,000	1	204.00

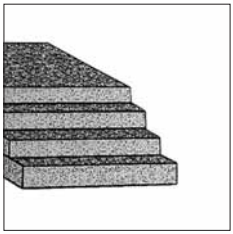
THOMAPLAST®-Cellular Rubber Plate made of EPDM - Shore 40°

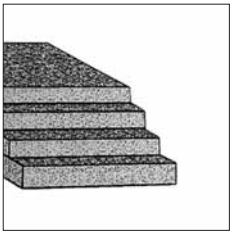
Product specification

- Outstanding elastic behavior, thus excellent deformability
- Very good resistance to aging, weather, and ozone
- Excellent resistance to heat, cold, hot water, and steam
- Flame-resistant
- Chemical resistance to glycol brake fluid, many acids and alkalis as well as polar solutions

Technical specification

- **Material:** EPDM (ethylene-propylene-diene rubber)
- **Colour:** black
- **Shore hardness A:** 40° ±10° (DIN 53505)
- **Temperature range:** -40 to +80 °C, for a short time +100 °C
- **Elongation at break:** >150 %
- **Tearing strength:** 0.5 kN/m
- **Tensile strength:** >400 kPa
- **Water absorption:** 3.5 %
- **Regulations:** approvals according to SAE J 18-79, FMVSS 302, ASTM D 1056-77, AFNOR NF-R 99-211 -80, DBL 5574.10
- **Tolerance:** DIN ISO 3302-1 E3
- **Design:** foam rubber, closed-cell





Item	Thickness mm	Dimensions mm	Unit piece	Price EURO
332049	2	250 x 400	1	42.00
332050	2	400 x 500	1	50.00
332051	2	500 x 800	1	62.00
332052	2	800 x 1,000	1	76.00
332053	2.5	250 x 400	1	50.00
332054	2.5	400 x 500	1	62.00
332055	2.5	500 x 800	1	76.00
332056	2.5	800 x 1,000	1	94.00
332057	3	250 x 400	1	56.00
332058	3	400 x 500	1	70.00
332059	3	500 x 800	1	86.00
332060	3	800 x 1,000	1	108.00
332061	4	250 x 400	1	64.00
332062	4	400 x 500	1	80.00
332063	4	500 x 800	1	100.00
332064	4	800 x 1,000	1	126.00
332065	5	250 x 400	1	72.00
332066	5	400 x 500	1	88.00
332067	5	500 x 800	1	110.00
332068	5	800 x 1,000	1	138.00
332069	6	250 x 400	1	78.00
332070	6	400 x 500	1	96.00
332071	6	500 x 800	1	120.00
332072	6	800 x 1,000	1	150.00
332073	8	250 x 400	1	84.00
332074	8	400 x 500	1	104.00
332075	8	500 x 800	1	130.00
332076	8	800 x 1,000	1	162.00
332077	10	250 x 400	1	98.00
332078	10	400 x 500	1	124.00
332079	10	500 x 800	1	154.00
332080	10	800 x 1,000	1	192.00
332081	12	250 x 400	1	102.00
332082	12	400 x 500	1	126.00
332083	12	500 x 800	1	158.00
332084	12	800 x 1,000	1	198.00
332085	15	250 x 400	1	108.00
332086	15	400 x 500	1	136.00
332087	15	500 x 800	1	170.00
332088	15	800 x 1,000	1	212.00
332089	20	250 x 400	1	118.00
332090	20	400 x 500	1	146.00
332091	20	500 x 800	1	184.00
332092	20	800 x 1,000	1	230.00
332093	25	250 x 400	1	124.00
332094	25	400 x 500	1	156.00
332095	25	500 x 800	1	196.00
332096	25	800 x 1,000	1	244.00
332097	30	250 x 400	1	134.00
332098	30	400 x 500	1	166.00
332099	30	500 x 800	1	208.00
332100	30	800 x 1,000	1	262.00
332101	40	250 x 400	1	144.00
332102	40	400 x 500	1	180.00
332103	40	500 x 800	1	224.00
332104	40	800 x 1,000	1	282.00

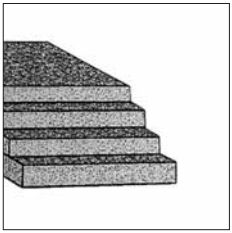
THOMAPLAST®-Cellular Rubber Plate made of NBR - Shore 15°

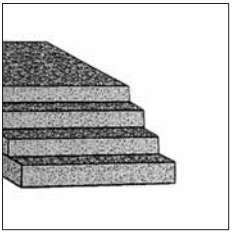
Product specification

- Excellent rubber-elastic properties
- Good resistance to weather and aging
- Good thermal resistance
- Very good resistance to mineral oils, vegetable and animal oils
- Insufficient resistance to solvents, flame-resistant hydraulic fluids, and fuels

Technical specification

- **Material:** NBR (butadiene-acrylonitrile rubber)
- **Colour:** black
- **Shore hardness A:** 10° - 15° (DIN 53505)
- **Temperature range:** -30 to +90 °C
- **Density:** 150 - 190 kg/m³
- **Rebound elasticity:** 45 - 55 %
- **Compression set:** 30 - 40 % (at +23 °C)
- **Tensile strength:** >500 kPa
- **Compression hardness:** 30 - 63 kPa
- **Elongation at break:** >200 %
- **Linear shrinkage:** max. 4 %
- **Water absorption:** max. 5 %





Item	Thickness mm	Tolerance mm	Dimensions mm	Unit piece	Price EURO
332135	2	±0.5	325 x 480	1	36.00
332136	2	±0.5	480 x 650	1	72.00
332137	2	±0.5	650 x 950	1	120.00
332138	2.5	±0.5	325 x 480	1	44.00
332139	2.5	±0.5	480 x 650	1	86.00
332140	2.5	±0.5	650 x 950	1	144.00
332141	3	±0.6	325 x 480	1	48.00
332142	3	±0.6	480 x 650	1	98.00
332143	3	±0.6	650 x 950	1	172.00
332144	4	±0.6	325 x 480	1	52.00
332145	4	±0.6	480 x 650	1	102.00
332146	4	±0.6	650 x 950	1	182.00
332147	5	±0.5	325 x 480	1	56.00
332148	5	±0.5	480 x 650	1	112.00
332149	5	±0.5	650 x 950	1	204.00
332150	6	±0.7	325 x 480	1	58.00
332151	6	±0.7	480 x 650	1	106.00
332152	6	±0.7	650 x 950	1	210.00
332153	8	±0.8	325 x 480	1	62.00
332154	8	±0.8	480 x 650	1	122.00
332155	8	±0.8	650 x 950	1	222.00
332156	10	±0.8	325 x 480	1	66.00
332157	10	±0.8	480 x 650	1	130.00
332158	10	±0.8	650 x 950	1	238.00
332159	12	±0.9	325 x 480	1	68.00
332160	12	±0.9	480 x 650	1	136.00
332161	12	±0.9	650 x 950	1	248.00
332162	15	±1.0	325 x 480	1	70.00
332163	15	±1.0	480 x 650	1	138.00
332164	15	±1.0	650 x 950	1	256.00
332165	20	±1.0	325 x 480	1	78.00
332166	20	±1.0	480 x 650	1	158.00
332167	20	±1.0	650 x 950	1	286.00

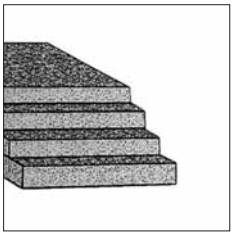
THOMAPLAST®-Foam Plate made of PE

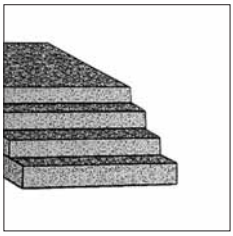
Product specification

- Cell structure closed-cell
- Free of foaming agents containing CFC
- Absolutely odourless, environmental-neutral and suitable for food contact applications
- Physiologically safe
- Non-toxic
- Formaldehyde- and polyvinyl-chloride-free
- Good resistance to aging
- Good resistance to ozone
- Good resistance to oil, gasoline, solvents, acids and alkalis

Technical specification

- **Material:** PE (polyethylene)
- **Colour:** white
- **Temperature range:** -80 to +100 °C
- **Density:** 33 kg/m³
- **Tensile strength:** 400 kPa (lengthwise) (ISO 1926); 265 kPa (crosswise) (ISO 1926)
- **Elongation at break:** 130 % (lengthwise) (ISO 1926); 125 % (crosswise) (ISO 1926)
- **Compression hardness:**
  at 10 % compression: 19 kPa (ISO 844)
  at 25 % compression: 40 kPa (ISO 844)
- **Compression set:**
  at +23 °C / 22 h: 25 % (ISO 1856-C)
  at +23 °C / 24 h: 11 % (ISO 1856-C)
- **Thermal conductivity:** 0.039 W/mk at +40 °C (ISO 2581)
- **Design:** closed-cell





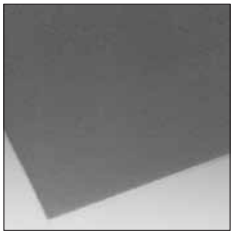
Item	Thickness mm	Tolerance mm	Dimensions mm	Unit piece	Price EURO
332322	2	±0.5	250 x 250	1	14.00
332323	2	±0.5	500 x 500	1	20.00
332324	2	±0.5	1,000 x 1,000	1	40.00
332325	3	±0.6	250 x 250	1	16.00

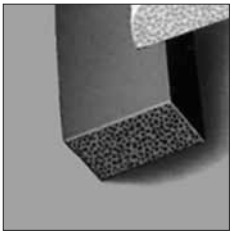
Item	Thickness mm	Tolerance mm	Dimensions mm	Unit piece	Price EURO
332326	3	±0.6	500 x 500	1	28.00
332327	3	±0.6	1,000 x 1,000	1	54.00
332328	4	±0.6	250 x 250	1	20.00
332329	4	±0.6	500 x 500	1	34.00
332330	4	±0.6	1,000 x 1,000	1	68.00
332331	5	±0.7	250 x 250	1	24.00
332332	5	±0.7	500 x 500	1	42.00
332333	5	±0.7	1,000 x 1,000	1	86.00
332334	6	±0.7	250 x 250	1	26.00
332335	6	±0.7	500 x 500	1	46.00
332336	6	±0.7	1,000 x 1,000	1	94.00
332337	8	±0.8	250 x 250	1	26.00
332338	8	±0.8	500 x 500	1	52.00
332339	8	±0.8	1,000 x 1,000	1	102.00
332340	10	±0.8	250 x 250	1	28.00
332341	10	±0.8	500 x 500	1	58.00
332342	10	±0.8	1,000 x 1,000	1	118.00

THOMAPLAST®-Foam Plate made of PEUR

Product specification
- Cell structure open-pored
- Without skin on both sides
- Good deformability
- Low density
- Volume compressible
- Limited resistance to hydrolysis
- Good impact resilience and good tear propagation resistance
- Not suitable for sliding functions

Technical specification
- **Material:** PEUR (cellular polyether urethane)
- **Colour:** grey
- **Temperature range:** -40 to +100 °C
- **Density:** 0.035 g/cm^3
- **Thickness tolerance:** DIN 7715 P3
- **Design:** open-pored, without skin





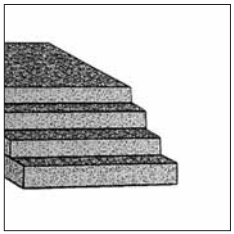
Item	Thickness mm	Dimensions mm	Unit piece	Price EURO
300909	3	350 x 500	1	24.00
300910	5	350 x 500	1	27.00
300911	8	350 x 500	1	41.00
300912	10	350 x 500	1	47.00
300913	15	350 x 500	1	49.00
300914	20	350 x 500	1	57.00
300915	25	350 x 500	1	70.00
300916	30	350 x 500	1	82.00

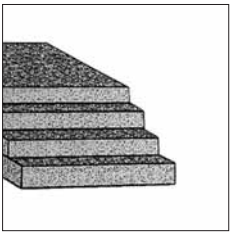
Item	Thickness mm	Dimensions mm	Unit piece	Price EURO
300917	40	350 x 500	1	100.00
300918	50	350 x 500	1	105.00
300919	60	350 x 500	1	116.00
300920	3	700 x 500	1	35.00
300921	5	700 x 500	1	40.00
300922	8	700 x 500	1	59.00
300923	10	700 x 500	1	64.00
300924	15	700 x 500	1	72.00
300925	20	700 x 500	1	82.00
300926	25	700 x 500	1	93.00
300927	30	700 x 500	1	113.00
300928	40	700 x 500	1	126.00
300929	50	700 x 500	1	136.00
300930	60	700 x 500	1	144.00
300931	3	700 x 1,000	1	57.00
300932	5	700 x 1,000	1	67.00
300933	8	700 x 1,000	1	77.00
300934	10	700 x 1,000	1	90.00
300935	15	700 x 1,000	1	95.00
300936	20	700 x 1,000	1	100.00
300937	25	700 x 1,000	1	110.00
300938	30	700 x 1,000	1	116.00
300939	40	700 x 1,000	1	151.00
300940	50	700 x 1,000	1	162.00
300941	60	700 x 1,000	1	192.00

THOMAPLAST®-Foam Plate made of PUR

Product specification
- Mixed-cell structure
- Good deformability
- Extremely high volume compressibility
- Absolutely free of plasticizers
- Good impact resilience and good tear propagation resistance
- The foam yellows without changing the physical parameters
- Good UV resistance
- Good resistance to aging
- Excellent resistance to gasoline and oil

Technical specification
- **Material:** PUR (polyurethane ester)
- **Colour:** dark-grey
- **Temperature range:** -40 to +170 °C
- **Density:** 230 kg/m^3
- **Tensile strength:** >1,000 kPa
- **Compression set:** <13 % (DIN 53572)
- **Design:** mixed-cell
- **Special features:** free of plasticizers





Item	Thickness mm	Tolerance mm	Dimensions mm	Unit piece	Price EURO
332262	0.6	±0.1	250 x 250	1	24.00
332263	0.6	±0.1	500 x 500	1	52.00
332264	0.6	±0.1	1,000 x 1,000	1	102.00
332265	0.8	±0.1	250 x 250	1	30.00
332266	0.8	±0.1	500 x 500	1	60.00
332267	0.8	±0.1	1,000 x 1,000	1	120.00
332268	1	±0.2	250 x 250	1	32.00
332269	1	±0.2	500 x 500	1	64.00
332270	1	±0.2	1,000 x 1,000	1	128.00
332271	1.3	±0.2	250 x 250	1	40.00
332272	1.3	±0.2	500 x 500	1	82.00
332273	1.3	±0.2	1,000 x 1,000	1	166.00
332274	1.6	±0.2	250 x 250	1	42.00
332275	1.6	±0.2	500 x 500	1	88.00
332276	1.6	±0.2	1,000 x 1,000	1	178.00
332277	2	±0.5	250 x 250	1	44.00
332278	2	±0.5	500 x 500	1	90.00
332279	2	±0.5	1,000 x 1,000	1	188.00
332280	3	±0.6	250 x 250	1	54.00
332281	3	±0.6	500 x 500	1	108.00
332282	3	±0.6	1,000 x 1,000	1	222.00
332283	5	±0.7	250 x 250	1	56.00
332284	5	±0.7	500 x 500	1	112.00
332285	5	±0.7	1,000 x 1,000	1	232.00

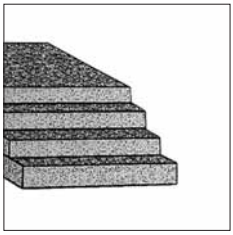
THOMAPLAST®-High-Tech Foam Plate made of Silicone

Product specification

- Cell structure predominantly closed pores
- With skin on both sides
- Very good volume compression
- Very good elastic behavior
- Very good resistance to cold
- Excellent resistance to heat and hot air
- Very good resistance to ozone, aging, and weather
- Very good dielectrical (non-conducting) properties
- Very good physiological properties
- Antiadhesive surface properties
- Highest gas permeability
- Chemical features:
  Good chemical resistance to synthetic, animal, and vegetable oils, glycols, flame-resistant hydraulic fluids, certain solvents, hot water. Poor resistance to mineral oils, solvents, acids, alkalis, and steam.

Technical specification

- **Material:** silicone foam (silicone rubber)
- **Colour:** white/beige
- **Shore hardness A:** 12° ±3° (DIN 53505)
- **Temperature range:** -60 to +200 °C
- **Density:** 300 ±100 kg/m^3
- **Elongation at break:** 207 %
- **Compression set:** 10 ±5 %
- **Tensile strength:** 1.3 N/mm^2
- **Sterilization:** hot air (+200 °C); steam (+136 °C)
- **Design:** closed-cell, with skin on both sides
- **Flammability rating:** UL 94 V-0



Item	Thickness mm	Tolerance mm	Dimensions mm	Unit piece	Price EURO
331591	2	±0.5	250 x 250	1	64.00
331592	2	±0.5	500 x 500	1	130.00
331593	2	±0.5	1,000 x 1,000	1	258.00
331594	3	±0.5	250 x 250	1	70.00
331595	3	±0.5	500 x 500	1	140.00
331596	3	±0.5	1,000 x 1,000	1	278.00
331597	4	±0.5	250 x 250	1	82.00
331598	4	±0.5	500 x 500	1	162.00
331599	4	±0.5	1,000 x 1,000	1	324.00
331600	5	±0.5	250 x 250	1	88.00
331601	5	±0.5	500 x 500	1	174.00
331602	5	±0.5	1,000 x 1,000	1	348.00
331603	6	±0.5	250 x 250	1	94.00
331604	6	±0.5	500 x 500	1	188.00
331605	6	±0.5	1,000 x 1,000	1	374.00
331606	8	±0.8	250 x 250	1	116.00
331607	8	±0.8	500 x 500	1	228.00
331608	8	±0.8	1,000 x 1,000	1	456.00
331609	10	±1.0	250 x 250	1	118.00
331610	10	±1.0	500 x 500	1	234.00
331611	10	±1.0	1,000 x 1,000	1	468.00
331654	12	±1.0	500 x 600	1	356.00
331655	12	±1.0	1,000 x 600	1	568.00
331656	15	±1.0	500 x 600	1	434.00
331657	15	±1.0	1,000 x 600	1	696.00
331658	20	±1.5	500 x 600	1	572.00
331659	20	±1.5	1,000 x 600	1	916.00

THOMAPLAST®-High-Pharm Foam Plate made of Silicone - FDA

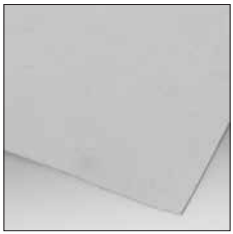
Application area

- Pharmaceutical technology, medical engineering, food technology, deadening, sealing technology, biotechnology, insulation technology

Product specification

- Premium material for pharmaceutical, medical and food uses
- Excellent elastic behavior
- Remarkable resistance to cold
- Excellent resistance to heat and hot air
- Very good resistance to ozone, aging, and weather
- Very good dielectrical (non-conducting) properties
- Very good physiological properties
- Good elongation at break and retention force
- Antiadhesive surface properties
- Highest gas permeability

Technical specification
- **Material:** silicone foam (silicone rubber)
- **Shore hardness A:** 25° ±5° (DIN 53505)
- **Temperature range:** -45 to +220 °C
- **Density:** 400 - 450 kg/m³
- **Elongation at break:** 290 %
- **Tearing strength:** 2.5 MPa
- **Design:** platinum-vulcanized, closed-cell, with skin on both sides
- **Tolerance:** DIN ISO 3302-1 E3
- **Regulations:** EU 90/128/EC, BfR XV and FDA § 177.2600



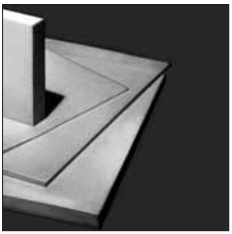
Item	Thickness mm	Tolerance mm	Dimensions mm	Unit piece	Price EURO
334077	2	±0.5	500 x 500	1	154.00
334078	2	±0.5	500 x 1,000	1	232.00
334079	2	±0.5	1,000 x 1,000	1	308.00
334080	3	±0.5	500 x 500	1	218.00
334081	3	±0.5	500 x 1,000	1	328.00
334082	3	±0.5	1,000 x 1,000	1	436.00
334083	4	±0.5	500 x 500	1	260.00
334084	4	±0.5	500 x 1,000	1	390.00
334085	4	±0.5	1,000 x 1,000	1	520.00
334086	5	±0.5	500 x 500	1	280.00
334087	5	±0.5	500 x 1,000	1	420.00
334088	5	±0.5	1,000 x 1,000	1	540.00
334089	6	±0.5	500 x 500	1	312.00
334090	6	±0.5	500 x 1,000	1	456.00
334091	6	±0.5	1,000 x 1,000	1	600.00
334092	8	±0.8	500 x 500	1	360.00
334093	8	±0.8	500 x 1,000	1	528.00
334094	8	±0.8	1,000 x 1,000	1	692.00
334098	12	±1.0	600 x 500	1	468.00
334099	12	±1.0	600 x 1,000	1	688.00
334100	12	±1.0	600 x 2.000	1	902.00

Plastics

THOMAPLAST®-Plate made of PA

Product specification
- Good mechanical stability, good impact toughness
- Good abrasion resistance, good coefficient of sliding friction
- Good temperature resistance, good resistance to aging
- High humidity absorbency causing dimensional alteration
- High-quality technical plastic for sliding functions in machine construction
- Very good chemical resistance to oils and petrols, good resistance to alkalis, but limited stability to acids

Technical specification
- **Material:** PA 6 (polyamide 6)
- **Colour:** natural
- **Temperature range:** -40 to +100 °C, for a short time +150 °C
- **Density:** 1.41 g/cm³
- **Volume resistivity:** 10^{14} Ohm x cm
- **Tolerance:** DIN ISO 3302-1 E2



Item	Thickness mm	Dimensions mm	Unit piece	Price EURO
300016	0.2	500 x 500	1	43.00
300017	0.25	500 x 500	1	48.00
300018	0.3	500 x 500	1	51.00
300019	0.4	500 x 500	1	55.00
300020	0.5	500 x 500	1	58.00
300021	1	500 x 500	1	62.00
300022	1.5	500 x 500	1	65.00
300023	2	500 x 500	1	72.00
300024	2.5	500 x 500	1	79.00
300025	3	500 x 500	1	86.00
300026	0.2	1,000 x 1,000	1	66.00
300027	0.25	1,000 x 1,000	1	71.00
300028	0.3	1,000 x 1,000	1	76.00
300029	0.4	1,000 x 1,000	1	88.00
300030	0.5	1,000 x 1,000	1	95.00
300031	1	1,000 x 1,000	1	103.00
300032	1.5	1,000 x 1,000	1	114.00
300033	2	1,000 x 1,000	1	129.00
300034	2.5	1,000 x 1,000	1	143.00
300035	3	1,000 x 1,000	1	157.00

THOMAPLAST®-Plate made of PA - extruded

Product specification
- Good mechanical stability
- Very good wear resistance
- Good impact toughness
- Good coefficient of sliding friction
- Good temperature resistance
- Good electrical insulating properties

Technical specification
- **Material:** PA 6 (polyamide)
- **Colour:** natural and black (material addition: MoS2 molybdenum sulphide)
- **Shore hardness D:** 72° - 82° (DIN 53505)
- **Temperature range:** -40 to +85 °C, for a short time +160 °C
- **Melting point:** +220 °C (DIN 53736)
- **Density:** 1.14 g/cm³ (DIN 53479)
- **Tensile strength:** 78 N/mm² (DIN 53455)
- **Elongation at break:** >50 % (DIN 53455)

- **Notch impact strength:** 4 kJ/m² (DIN 53453)
- **Elastic modulus:** 3,100 N/mm² (DIN 53457)
- **Thermal conductivity:** 0.28 W/K x m (DIN 52612)
- **Dielectric constant:** 3.9 at 50 Hz (DIN 53483)
- **Volume resistivity:** 10^{15} Ohm x cm (DIN 53482)

Item	Thick-ness mm	Tolerance mm	Colour	Dimensions mm	Unit piece	Price EURO
301661	0.5	+0.08 / -0.02	nature	500 x 500	1	64.00
301662	0.5	+0.08 / -0.02	nature	500 x 1,000	1	100.00
301663	0.5	+0.08 / -0.02	nature	1,000 x 1,000	1	151.00
301664	1	±0.10	nature	500 x 500	1	98.00
301665	1	±0.10	nature	500 x 1,000	1	144.00
301666	1	±0.10	nature	1,000 x 1,000	1	192.00
301667	1.5	±0.15	nature	500 x 500	1	116.00
301668	1.5	±0.15	nature	500 x 1,000	1	159.00
301669	1.5	±0.15	nature	1,000 x 1,000	1	202.00
301670	2	±0.15	nature	500 x 500	1	144.00
301671	2	±0.15	nature	500 x 1,000	1	192.00
301672	2	±0.15	nature	1,000 x 1,000	1	231.00
301673	3	±0.20	nature	500 x 500	1	172.00
301674	3	±0.20	nature	500 x 1,000	1	202.00
301675	3	±0.20	nature	1,000 x 1,000	1	287.00
301676	4	±0.20	nature	500 x 500	1	192.00
301677	4	±0.20	nature	500 x 1,000	1	228.00
301678	4	±0.20	nature	1,000 x 1,000	1	310.00
301679	5	±0.25	nature	500 x 500	1	192.00
301680	5	±0.25	nature	500 x 1,000	1	264.00
301681	5	±0.25	nature	1,000 x 1,000	1	335.00
301682	6	±0.25	nature	500 x 500	1	208.00
301683	6	±0.25	nature	500 x 1,000	1	289.00
301684	6	±0.25	nature	1,000 x 1,000	1	346.00
301685	8	+0.9 / +0.2	nature	250 x 305	1	159.00
301686	8	+0.9 / +0.2	nature	305 x 500	1	187.00
301687	8	+0.9 / +0.2	nature	500 x 610	1	266.00
301688	8	+0.9 / +0.2	black	250 x 305	1	159.00
301689	8	+0.9 / +0.2	black	305 x 500	1	187.00
301690	8	+0.9 / +0.2	black	500 x 610	1	266.00
301691	10	+0.9 / +0.2	nature	250 x 305	1	177.00
301692	10	+0.9 / +0.2	nature	305 x 500	1	213.00
301693	10	+0.9 / +0.2	nature	500 x 610	1	325.00
301694	10	+0.9 / +0.2	black	250 x 305	1	177.00
301695	10	+0.9 / +0.2	black	500 x 610	1	213.00
301982	10	+0.9 / +0.2	black	500 x 610	1	325.00
301696	16	+1.5 / +0.3	nature	250 x 305	1	192.00
301697	16	+1.5 / +0.3	nature	305 x 500	1	266.00
301698	16	+1.5 / +0.3	nature	500 x 610	1	341.00
301699	16	+1.5 / +0.3	black	250 x 305	1	192.00
301700	16	+1.5 / +0.3	black	305 x 500	1	266.00
301701	16	+1.5 / +0.3	black	500 x 610	1	341.00
301702	20	+1.5 / +0.3	nature	250 x 305	1	208.00
301703	20	+1.5 / +0.3	nature	305 x 500	1	289.00
301704	20	+1.5 / +0.3	nature	500 x 610	1	381.00
301705	20	+1.5 / +0.3	black	250 x 305	1	208.00
301706	20	+1.5 / +0.3	black	305 x 500	1	289.00
301707	20	+1.5 / +0.3	black	500 x 610	1	381.00
301708	25	+1.5 / +0.3	nature	250 x 305	1	238.00
301709	25	+1.5 / +0.3	nature	305 x 500	1	315.00
301710	25	+1.5 / +0.3	nature	500 x 610	1	473.00
301711	25	+1.5 / +0.3	black	250 x 305	1	238.00
301712	25	+1.5 / +0.3	black	305 x 500	1	315.00
301713	25	+1.5 / +0.3	black	500 x 610	1	473.00
301714	30	+2.5 / +0.5	nature	250 x 305	1	289.00
301715	30	+2.5 / +0.5	nature	305 x 500	1	387.00
301716	30	+2.5 / +0.5	nature	500 x 610	1	578.00
301717	30	+2.5 / +0.5	black	250 x 305	1	289.00
301718	30	+2.5 / +0.5	black	305 x 500	1	387.00
301983	30	+2.5 / +0.5	black	500 x 610	1	578.00

THOMAPLAST®-Plate made of PC

Application area

- Precision parts in precision mechanics, safety glasswork, optical parts in general, insulating parts in electrical engineering, computer cases, parts coming into contact with food, elements for medical and pharmaceutical devices.

Product specification

- High mechanical stability
- Very high impact toughness, also at low temperatures
- Best temperature resistance
- Maintenance of stiffness in a broad temperature range
- Very high dimensional stability
- Resistance to weather
- Hardly inflammable
- Good electrical insulating properties
- Neutral in taste and odour
- Bondable and weldable
- Not usable for slid functions
- Physiologically safe (approved for use with food)
- Limited resistance to hydrolysis
- Technical plastic for impact-loaded transparent constructions in machine building and electrical engineering

Technical specification

- **Material:** PC (polycarbonate)
- **Colour:** milky, colourless
- **Density:** 1.2 g/cm³ (ISO 1183)
- **Temperature range:** -60 to +120 °C, for a short time +130 °C
- **Thermal conductivity:** 0.21 W/K x m (DIN 52612)
- **Flammability rating:** UL 94 HB
- **Tensile strength:** 70 N/mm² (ISO 527-2)
- **Elongation at break:** >50 % (ISO 527-2)
- **Elasticity modulus:** 2,400 N/mm² (ISO 527-2)
- **Rockwell hardness:** M 75 (ISO 20039-2)
- **Notch impact strength:** 9 KJ/m² (ISO 179/1eA)
- **Dielectric loss factor:**
  at 1 MHz: 0.009 (IEC 60250)
  at 100 Hz: 0.006 (IEC 60250)
- **Dielectric strength:** 29 kV/mm (IEC 60243-1)
- **Volume resistivity:** 10^{13} Ohm x m (IEC 60093)
- **Surface resistivity:** 10^{15} Ohm (IEC 60093)
- **Regulations:** according to BfR and FDA

Item	Thickness mm	Tolerance mm	Dimensions mm	Unit piece	Price EURO
300454	15	+0.3 / +1.5	300 x 500	1	186.00
300455	20	+0.3 / +1.5	300 x 500	1	240.00
300456	25	+0.3 / +1.5	300 x 500	1	293.00
300457	30	+0.5 / +2.5	300 x 500	1	313.00
300458	40	+0.5 / +2.5	300 x 500	1	367.00
300459	50	+0.5 / +2.5	300 x 500	1	403.00

THOMAPLAST®-Plate made of PCTFE

Application area
- Cryogenics, chemistry, nuclear technology, medical engineering, electrical engineering

Product specification
- PCTFE has a significantly greater hardness and dimensional stability compared to PTFE
- PCTFE is the most rigid of all fluorinated plastics
- Extremely low permeability to gas
- PCTFE preserves its dimensional stability also at higher minus temperatures (-255 °C)
- Excellent radiation resistance, resistant to UV-rays and X-rays
- Remarkable chemical resistance to strong mineral acids (such as fuming nitric acid and hydrofluoric acid as well as aggressive reagents and concentrated sodium) and a lot of organic compounds
- Extremely wide temperature range
- Very good mechanical stability, lowest creep particularly at pressure load
- Flame-resistant even at high oxygen concentration (limit „oxygen index“ 100%)
- Extremely high resistance to aging
- Not permeable to steam and water
- Not permeable to fluid even at lowest temperatures

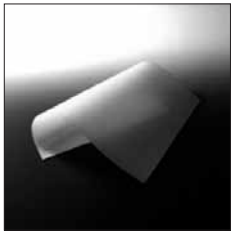
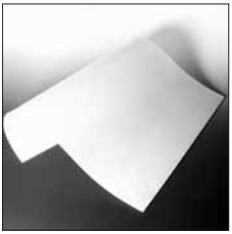
Technical specification
- **Material:** PCTFE (polychlorotrifluoroethylene)
- **Colour:** natural, translucent
- **Shore hardness D:** 75° - 80° (ASTM D 676)
- **Temperature range:** -255 to +150 °C, for a short time +200 °C
- **Density (amorphous):** 2.10 - 2.16 g/cm^3 (ASTM D 1050-68)
- **Tensile strength:**
  at +23 °C: 32 - 40 MPa (ASTM D 638-80)
  at +120 °C: 13 - 16 MPa (ASTM D 638-80)
- **Elongation at break:** 100 - 250 % (ASTM D 638-80)
- **Pressure resistance:** 40 - 45 MPa (ISO 604)
- **Surface resistivity:** 1.2 x 10^{18} Ohm/cm^2 (ASTM D 257-78)
- **Dielectric constant:** 2.4 - 3 at 102 - 108 Hz (ASTM D 150)

Item	Thickness mm	Dimensions mm	Unit piece	Price EURO
331335	2	200 x 100	1	517.00
331336	2	200 x 200	1	632.00
331337	2	150 x 150	1	556.00
331338	2	350 x 150	1	706.00
331347	5	200 x 100	1	661.00
331348	5	200 x 200	1	891.00
331349	5	150 x 150	1	701.00
331350	5	350 x 150	1	970.00
331351	10	200 x 100	1	770.00
331352	10	200 x 200	1	1,234.00
331353	10	150 x 150	1	902.00
331354	10	350 x 150	1	1,487.00

THOMAPLAST®-Plate made of PE - plasticized, Food

Product specification
- Suited for food
- Good resistance to weather and aging
- Good impact toughness (even at low temperatures)
- Antiadhesive surface, low mechanical stability
- Not usable for slid functions
- Suitable for weldments in container construction
- Good chemical resistance to acids and alkalis, limited resistance to oils and petrols

Technical specification
- **Material:** PE, plasticized (polyethylene, plasticized)
- **Colour:** natural
- **Shore hardness D:** 45° (DIN 53505)
- **Temperature range:** -50 to +60 °C, for a short time +90 °C
- **Density:** 0.92 g/cm^3 (ISO 1183)
- **Yield stress:** 10 N/mm^2 (ISO 527-1)
- **Elongation at yield stress:** 12 % (ISO 527-1)
- **Tearing strength:** >50 % (ISO 527-1)
- **E-modulus:** 200 N/mm^2 (ISO 527-1)
- **Notch impact strength:** 85 MJ/mm^2 /ISO 179)
- **Thermal conductivity:** 0.35 W/mK (DIN 52612)
- **Flammability rating:** B2 (DIN 4102); HB (UL 94)
- **Volume resistivity:** 10^{15} Ohm x cm (DIN VDE0303)
- **Surface resistance:** 10^{14} Ohm (DIN VDE0303)
- **Dieletric strength:** 45 kV/mm (IEC 60243)
- **Regulations:** conforming to BGA III, FDA 21 CFR 177.1520

Item	Thickness mm	Dimensions mm	Unit piece	Price EURO
300058	0.1	500 x 500	1	43.00
300059	0.2	500 x 500	1	48.00
300060	0.3	500 x 500	1	51.00
300061	0.5	500 x 500	1	55.00
300062	1	500 x 500	1	58.00
300063	1.5	500 x 500	1	62.00
300064	2	500 x 500	1	65.00
300065	2.5	500 x 500	1	69.00
300066	3	500 x 500	1	72.00
300067	0.1	1,000 x 1,000	1	66.00
300068	0.2	1,000 x 1,000	1	74.00
300069	0.3	1,000 x 1,000	1	76.00
300070	0.5	1,000 x 1,000	1	80.00
300071	1	1,000 x 1,000	1	88.00
300072	1.5	1,000 x 1,000	1	95.00
300073	2	1,000 x 1,000	1	104.00
300074	2.5	1,000 x 1,000	1	109.00
300075	3	1,000 x 1,000	1	119.00

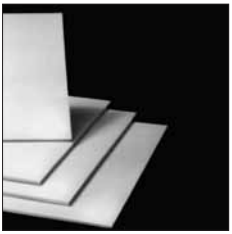
THOMAPLAST®-Plate made of PE - rigid

Product specification

- Good resistance to weather and aging
- Antiadhesive surface
- Good impact toughness (even at low temperatures)
- Low mechanical stability, good swaging strength
- Hydrophobic
- Suitable for weldments in container construction
- Very good chemical resistance to acids and alkalis, good resistance to oils and petrols
- Physiologically safe conforming to BfR

Technical specification

- **Material:** PE, rigid (polyethylene, rigid)
- **Colour:** natural
- **Shore hardness D:** 52° (DIN 53505)
- **Temperature range:** -50 to +80 °C
- **Density:** 0.94 g/cm^3 (ISO 1183)
- **Yield stress:** 21 MPa (ISO 527)
- **Elongation at yield stress:** 9 % (ISO 527)
- **Tearing strength:** 500 % (ISO 527)
- **E-modulus:** 800 MPa (ISO 527)
- **Ball pressure hardness:** 43 MPa (ISO 2039-1)
- **Notch impact strength:** 13 kJ/m^2 (ISO 179)
- **Thermal conductivity:** 0.38 W/mK (DIN 52612)
- **Flammability rating:** B2 (DIN 4102, part 1)
- **Dielectric strength:** 50 kV/mm
- **Surface resistance:** 10^{14} Ohm (DIN IEC60093)
- **Regulations:** KTW-approval



Item	Thickness mm	Dimensions mm	Unit piece	Price EURO
300079	0.5	500 x 500	1	55.00
300080	1	500 x 500	1	58.00
300081	1.5	500 x 500	1	62.00
300082	2	500 x 500	1	65.00
300083	2.5	500 x 500	1	69.00
300084	3	500 x 500	1	72.00
300088	0.5	1,000 x 1,000	1	80.00
300089	1	1,000 x 1,000	1	88.00
300090	1.5	1,000 x 1,000	1	95.00
300091	2	1,000 x 1,000	1	104.00
300092	2.5	1,000 x 1,000	1	109.00
300093	3	1,000 x 1,000	1	119.00

THOMAPLAST®-Plate made of HDPE

Product specification

- Good impact toughness (even at low temperatures)
- Good chemical resistance
- High density and UV resistance
- Good resistance to weather and aging
- Antiadhesive surface
- Low mechanical stability
- Not usable for slid functions

Technical specification

- **Material:** HDPE (polyethylene, rigid)
- **Colour:** black
- **Shore hardness D:** 66° (DIN 53505)
- **Density:** 0.95 g/cm^3 (DIN 53479)
- **Temperature range:** -50 to +80 °C, for a short time +90 °C
- **Tearing strength:** 30 MPa (DIN 53455)
- **Elongation at break:** 1,000 % (DIN 53455)
- **Bending strength:** 30 MPa (DIN 53452)
- **Thermal conductivity:** 0.43 W/K x m (DIN 52612)
- **Volume resistivity:** >10^{15} Ohm x cm (DIN 53482)
- **Dielectric strength:** >70 kV/mm (DIN 53481)

Item	Thickness mm	Tolerance mm	Dimensions mm	Unit piece	Price EURO
302095	1	± 0.12	500 x 500	1	47.00
302096	1	± 0.12	500 x 1,000	1	75.00
302097	1	± 0.12	1,000 x 1,000	1	110.00
302098	2	± 0.12	500 x 500	1	67.00
302099	2	± 0.12	500 x 1,000	1	100.00
302100	2	± 0.12	1,000 x 1,000	1	133.00
302101	3	± 0.12	500 x 500	1	100.00
302102	3	± 0.12	500 x 1,000	1	149.00
302103	3	± 0.12	1,000 x 1,000	1	200.00

Item	Thickness mm	Tolerance mm	Dimensions mm	Unit piece	Price EURO
302104	4	± 0.15	500 x 500	1	113.00
302105	4	± 0.15	500 x 1,000	1	161.00
302106	4	± 0.15	1,000 x 1,000	1	198.00
302107	5	± 0.15	500 x 500	1	123.00
302108	5	± 0.15	500 x 1,000	1	167.00
302109	6	± 0.15	500 x 500	1	141.00
302110	6	± 0.15	500 x 1,000	1	177.00
302111	8	± 0.20	500 x 500	1	159.00
302112	8	± 0.20	500 x 1,000	1	187.00
302113	10	± 0.20	500 x 500	1	180.00
302114	10	± 0.20	500 x 1,000	1	202.00
302115	12	± 0.30	500 x 500	1	200.00
302116	12	± 0.30	500 x 1,000	1	238.00
302117	15	± 0.40	500 x 500	1	208.00
302118	15	± 0.40	500 x 1,000	1	254.00

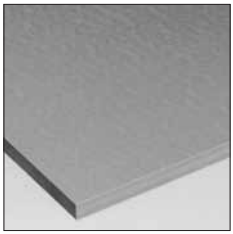
THOMAPLAST®-Plate made of PEEK

Application area

- Engine parts, plain bearings, insulations, butterfly valves

Product specification

- Heavy-duty plastic
- Outstanding mechanical stability, stiffness and hardness
- High heat stability
- Good impact toughness
- Best wear resistance
- Very good chemical resistance, except for conc. sulfuric acid, conc. nitric acid and aqua regia (chloronitrous acid)
- Outstanding hydrolysis resistance
- Very high temperature resistance (outstandingly high operating temperature)
- Good creep resistance even at high temperatures
- Very high dimensional stability
- Inherent flame resistance
- Low formation of smoke
- Good electrical insulating properties as well as favorable dielectric characteristics
- Outstanding radiation resistance
- High-quality technical plastic (high-tech polymer), predominantly for mechanically and thermally highly loaded parts, also with antifrictional property for machine building, pump and fitting construction as well as for electrical engineering.
- For replacement of PTFE because of increased mechanical stability, outstanding wear resistance.
- For replacement of metals for pump bottom parts, valve seats, sliding elements, gearwheels, carrying wheels, high-temperature insulating parts in electrical engineering, parts in touch with boiling water or hot steam.



Technical specification

- **Material:** PEEK (polyether-etherketone)
- **Colour:** yellow-brown
- **Density:** 1.32 g/cm^3 (ISO 1183)
- **Temperature range:** up to +250 °C, for a short time +310 °C
- **Melting point:** +340 °C (ISO 3146)
- **Thermal conductivity:** 0.25 W/k x m (DIN 52612)
- **Flammability rating:** UL 94 V-0 (thickness 1.5 mm)
- **Tensile strength:** 110 N/mm^2 (ISO 527-2)
- **Elongation at break:** 20 % (ISO 527-2)
- **Elastic modulus:** 4,400 N/mm^2 (ISO 527-2)
- **Rockwell hardness:** M 105 (ISO 2039-2)
- **Notch impact strength:** 3.5 KJ/m^2 (ISO 179/1eA)
- **Dielectric loss factor:**
  at 1 MHz: 0.002 (IEC 60250)
  at 100 Hz: 0.001 (IEC 60250)
- **Dielectric strength:** 24 kV/mm (IEC 60243-1)
- **Volume resistivity:** 10^{12} Ohm x m (IEC 60093)
- **Surface resistivity:** 10^{13} Ohm (IEC 60093)
- **Regulations:** according to BfR and FDA

Item	Thickness mm	Tolerance mm	Dimensions mm	Unit piece	Price EURO
300398	10	+0.2 / +0.9	300 x 250	1	473.00
300399	16	+0.3 / +1.5	300 x 250	1	697.00
300400	20	+0.3 / +1.5	300 x 250	1	858.00
300401	25	+0.3 / +1.5	300 x 250	1	1,058.00
300402	30	+0.5 / +2.5	300 x 250	1	1,280.00
300403	40	+0.5 / +2.5	300 x 250	1	1,679.00
300404	50	+0.5 / +2.5	300 x 250	1	1,937.00

THOMAPLAST®-Plate made of PI

Application area

- For replacement of metals and ceramics, manufacturing of valve seats („high-tech valves“), slide bearings, as well as for pump bottom parts, rollers, high-temperature insulations and for electrotechnical parts.
- Nuclear, automobile and electrical industry, semi-conductor industry, defense technology, glass industry, injection moulding and extrusion plants, chemical industry („no steam“) and welding plants.

Product specification

- Heavy-duty plastic
- Outstandingly high temperature resistance (operating temperature limit)
- Very high stiffness and hardness
- Remarkable mechanical stability maintained over a large temperature range
- Very good wear resistance
- Good chemical resistance
- Good antifrictional properties
- Outstanding creep strength
- Very good dimensional stability
- Good electrical insulating properties
- Favorable dielectric characteristics
- Inherent flame resistance
- Outstanding radiation resistance
- Extremely high-quality technical plastic (duroplast) for special applications in machine and chemical apparatus building as well as in electrical engineering

Technical specification

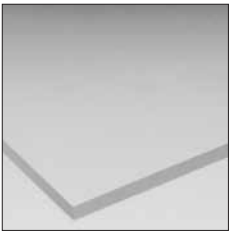
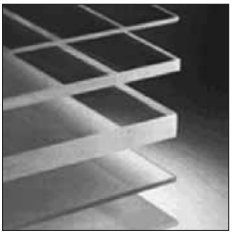
- **Material:** PI (polyimide)
- **Colour:** natural (chestnut)
- **Temperature range:** -250 to +260 °C, for a short time +400 °C
- **Thermal conductivity:** 0.35 W/K x m (DIN 52612)
- **Burning characteristics:** 53 % („oxygen index") (ASTM D2863)
- **Flammability rating:** UL 94 V-0 (thickness 1.5 mm)
- **Density:** 1.43 g/cm^3 (ASTM D 792)
- **Tensile strength:** 86 N/mm^2 (ASTM D 638M)
- **Elongation at break:** 7.5 % (ASTM D 638M)
- **Rockwell hardness:** M 92-102
- **Elastic modulus:** 3,100 N/mm^2 (ASTM D 790)
- **Izod impact toughness:** 750 J/m (ASTM D 256)
- **Dielectric strength:** 22 kV/mm (ASTM D 149)
- **Volume resistivity:** 10^{16} Ohm x cm (ASTM D 257)
- **Surface resistivity:** 10^{15} Ohm/cm2 (ASTM D 257)

Item	Thickness mm	Dimensions mm	Unit piece	Price EURO
300472	1.6	254 x 254	1	2,006.00
300473	3.2	254 x 254	1	2,751.00
300474	4.8	254 x 254	1	3,667.00
300475	6.4	254 x 254	1	4,253.00
300476	12.7	254 x 254	1	5,567.00
300477	25.4	254 x 254	1	8,901.00
300478	38.1	254 x 254	1	13,505.00

THOMAPLAST®-Plate made of PMMA

Product specification

- Very good optical features
- UV-resistance
- Good resistance to acids and alkalis
- Highest stiffness and hardness
- High notch impact sensitivity
- Not suitable for slid functions
- Ideal plastic for transparent structures in machine building, in electrical engineering and model construction
- 92 % transparency, with protective film on both sides.

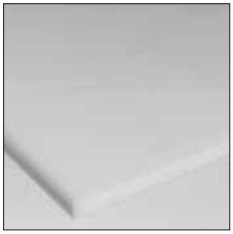



Technical specification

- **Material:** PMMA (polymethylmethacrylate)
- **Version:** casted
- **Colour:** glass-clear
- **Temperature range:** -40 to +80 °C, for a short time+90 °C
- **Density:** 1.19 g/cm^3 (DIN 53479)
- **Tearing strength:** 72 MPa (DIN 53455)
- **Elongation at break:** 5 % (DIN 53455)
- **Impact strength:** 15 kJ/m^2 (DIN 53453)
- **Notch impact strength:** 1.5 kJ/m^2 (DIN 53453)
- **Bending strength:** 125 MPa (DIN 53452)
- **Thermal conductivity:** 0.19 W/K x m at +20 °C (DIN 52612)
- **Dielectric constant:** 2.9 (DIN 53483)
- **Volume resistivity:** 10^{15} Ohm x cm (DIN 53482)
- **Dielectric strength:** 30 kV/mm (DIN 53481)

Item	Thickness mm	Tolerance mm	Dimensions mm	Unit piece	Price EURO
301824	2	±0.60	500 x 500	1	59.00
301825	2	±0.60	1,000 x 1,000	1	136.00
301826	3	±0.70	500 x 500	1	65.00
301827	3	±0.70	1,000 x 1,000	1	151.00
301828	4	±0.80	500 x 500	1	76.00
301829	4	±0.80	1,000 x 1,000	1	177.00
301830	5	±0.90	500 x 500	1	85.00
301831	5	±0.90	1,000 x 1,000	1	190.00
301832	6	±1.00	500 x 500	1	89.00
301833	6	±1.00	1,000 x 1,000	1	208.00
301834	8	±1.20	500 x 500	1	106.00
301835	8	±1.20	1,000 x 1,000	1	233.00
301836	10	±1.40	500 x 500	1	119.00
301837	10	±1.40	1,000 x 1,000	1	243.00
301838	15	±1.90	500 x 500	1	149.00
301839	15	±1.90	1,000 x 1,000	1	271.00
301940	20	±2.00	500 x 500	1	175.00
301941	25	±2.50	500 x 500	1	219.00
301942	30	±3.40	500 x 500	1	298.00
301943	40	±3.90	500 x 500	1	422.00
301944	50	±4.00	500 x 500	1	528.00

THOMAPLAST®-Plate made of POM - Standard-Quality



Product specification

- Very good mechanical stability, tough, good coefficient of sliding friction
- Great hardness and stiffness, limited weather resistance
- Very good dimensional stability, particularly suitable for precise parts
- Good temperature resistance, best machining workability
- Not flame-resistant, combustible, not resistant to hydrolysis
- High-quality technical plastic for sliding functions in machine building and in precision mechanics
- Excellent resistance to oils and petrols, good resistance to alkalis

Technical specification
- **Material:** POM (polyacetal / polyoxymethylene)
- **Colour:** natural
- **Density:** 1.41 g/cm³ (DIN 53479)
- **Temperature range:** -50 to +100 °C, for a short time +140 °C
- **Thermal conductivity:** 0.31 W(K x m) (DIN 52612)
- **Flammability rating:** UL 94 HB (ISO 1210)
- **Tensile strength:** 68 MPa (DIN EN ISO 527)
- **Elongation at break:** 35 % (DIN EN ISO 527)
- **Elastic modulus:** 3,100 MPa (DIN EN ISO 527)
- **Notch impact strength:** 10 kJ/m² (ISO 179/1eA)
- **Shore hardness D:** 82 ° (DIN 53505)
- **Dielectric loss factor:** 0.002 (at 50 Hz) (IEC 60250)
- **Dielectric strength:** 40 kV/mm (IEC 60243-1))
- **Volume resistivity:** 10^{13} Ohm x cm (IEC 60093)
- **Surface resistivity:** 10^{13} Ohm (IEC 60093)
- **Tolerance:** DIN ISO 3302-1 E2

Item	Thickness mm	Dimensions mm	Unit piece	Price EURO
300000	0.5	500 x 500	1	54.00
300001	1	500 x 500	1	65.00
300002	1.5	500 x 500	1	72.00
300003	2	500 x 500	1	79.00
300004	2.5	500 x 500	1	94.00
300005	3	500 x 500	1	105.00
300006	4	500 x 500	1	119.00
300007	5	500 x 500	1	144.00
300008	0.5	1,000 x 1,000	1	86.00
300009	1	1,000 x 1,000	1	109.00
300010	1.5	1,000 x 1,000	1	123.00
300011	2	1,000 x 1,000	1	143.00
300012	2.5	1,000 x 1,000	1	166.00
300013	3	1,000 x 1,000	1	194.00
300014	4	1,000 x 1,000	1	248.00
300015	5	1,000 x 1,000	1	273.00

THOMAPLAST®-Plate made of POM - FDA

Application area
- Heavily loaded sliding elements, pump elements and rollers, chemical pump parts, filter housings, apparatus construction

Product specification
- Good temperature resistance
- Good chemical resistance
- Resistant to hydrolysis
- Very good dielectrical properties
- Not usable for slid functions
- Not suitable for use at low temperatures (embrittling at low temperatures)
- Not resistant to weather
- For drinking water according to KTW

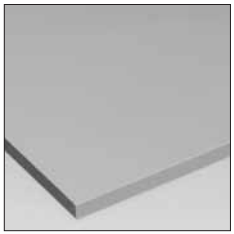
Technical specification
- **Material:** PP (polypropylene)
- **Design:** extruded
- **Colour:** pebble grey (RAL 7032)
- **Density:** 0.91 g/m³ (ISO 1183)
- **Temperature range:** 0 to +100 °C, for a short time +110 °C
- **Thermal conductivity:** 0.22 W/K x m (DIN 52612)
- **Flammability rating:** UL 94 HB
- **Melting point:** +165 °C (ISO 3146)
- **Tensile strength:** 30 N/mm² (ISO 527-2)
- **Elongation at break:** >50 % (ISO 527-2)
- **Elastic modulus:** 1,300 N/mm² (ISO 527-2)
- **Notch impact strength:** 9 KJ/m² (ISO 179/1eA)
- **Volume resistivity:** >10^{12} Ohm x m (IEC 60093)
- **Surface resistivity:** 10^{13} Ohm (IEC 60093)
- **Regulations:** BfR, FDA 21 CFR 177.1520

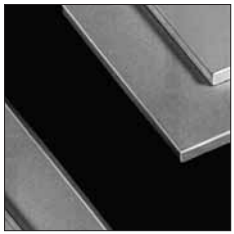
Item	Thickness mm	Tolerance mm	Dimensions mm	Unit piece	Price EURO
300495	8	+0.2 / +0.9	300 x 500	1	90.00
300496	10	+0.2 / +0.9	300 x 500	1	102.00
300498	15	+0.3 / +1.5	300 x 500	1	142.00
300499	20	+0.3 / +1.5	300 x 500	1	188.00
300500	25	+0.3 / +1.5	300 x 500	1	204.00
300501	30	+0.5 / +2.5	300 x 500	1	235.00
300502	40	+0.5 / +2.5	300 x 500	1	278.00
300503	50	+0.5 / +2.5	300 x 500	1	306.00

THOMAPLAST®-Plate made of PP - pebble grey

Application area
- Heavily loaded sliding elements, pump elements and rollers, chemical pump parts, filter housings, apparatus construction

Product specification
- Good temperature resistance
- Good chemical resistance
- Resistant to hydrolysis
- Very good dielectrical properties
- Not usable for slid functions
- Not suitable for use at low temperatures (embrittling at low temperatures)
- Not resistant to weather
- For drinking water according to KTW





Technical specification
- **Material:** PP (polypropylene)
- **Design:** extruded
- **Colour:** pebble grey (RAL 7032)
- **Density:** 0.91 g/m³ (ISO 1183)
- **Temperature range:** 0 to +100 °C, for a short time +110 °C
- **Thermal conductivity:** 0.22 W/K x m (DIN 52612)
- **Flammability rating:** UL 94 HB
- **Melting point:** +165 °C (ISO 3146)

- **Tensile strength:** 30 N/mm² (ISO 527-2)
- **Elongation at break:** >50 % (ISO 527-2)
- **Elastic modulus:** 1,300 N/mm² (ISO 527-2)
- **Notch impact strength:** 9 KJ/m² (ISO 179/1eA)
- **Volume resistivity:** >10^{12} Ohm x m (IEC 60093)
- **Surface resistivity:** 10^{13} Ohm (IEC 60093)
- **Regulations:** BfR, FDA 21 CFR 177.1520

Item	Thickness mm	Tolerance mm	Dimensions mm	Unit piece	Price EURO
302131	1	±0.11	500 x 500	1	40.00
302132	1	±0.11	500 x 1,000	1	65.00
302133	1	±0.11	1,000 x 1,000	1	97.00
302134	2	±0.14	500 x 500	1	59.00
302135	2	±0.14	500 x 1,000	1	89.00
302136	2	±0.14	1,000 x 1,000	1	118.00
302137	3	±0.17	500 x 500	1	89.00
302138	3	±0.17	500 x 1,000	1	132.00
302139	3	±0.17	1,000 x 1,000	1	177.00
302140	4	±0.20	500 x 500	1	101.00
302141	4	±0.20	500 x 1,000	1	142.00
302142	4	±0.20	1,000 x 1,000	1	177.00
302143	5	±0.23	500 x 500	1	111.00
302144	5	±0.23	500 x 1,000	1	155.00
302145	5	±0.23	1,000 x 1,000	1	207.00
302146	6	±0.26	500 x 500	1	122.00
302147	6	±0.26	500 x 1,000	1	158.00
302148	6	±0.26	1,000 x 1,000	1	212.00
302149	8	±0.32	500 x 500	1	142.00
302150	8	±0.32	500 x 1,000	1	175.00
302151	8	±0.32	1,000 x 1,000	1	236.00
302152	10	±0.38	500 x 500	1	162.00
302153	10	±0.38	500 x 1,000	1	202.00
302154	10	±0.38	1,000 x 1,000	1	266.00
302155	12	±0.44	500 x 500	1	174.00
302156	12	±0.44	500 x 1,000	1	213.00
302157	12	±0.44	1,000 x 1,000	1	283.00
302158	15	±0.53	500 x 500	1	189.00
302159	15	±0.53	500 x 1,000	1	228.00

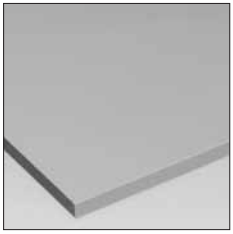
THOMAPLAST®-Plate made of PP - natural

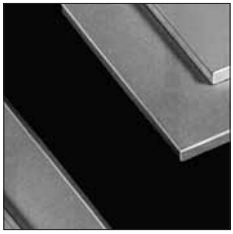
Product specification

- Very good dielectrical properties
- Not usable for slid functions
- Low mechanical stability
- Good temperature resistance
- Embrittling at low temperatures
- Good resistance to aging
- Not resistant to weather
- Ideally suitable for weldments in container and laboratory construction
- Good chemical resistance to oils, petrols, acids and alkalis
- Tough and abrasion-resistant

Technical specification

- **Material:** PP (polypropylene)
- **Colour:** natural
- **Density:** 0.93 g/cm³ (DIN EN ISO 1183)
- **Temperature range:** -15 to +120 °C, for a short time +130 °C
- **Thermal conductivity:** 0.22 W/mk (DIN 52612)
- **Flammability rating:** UL 94 V-2
- **Tensile strength:** 30 N/mm² (DIN EN ISO 527)
- **Elongation at break:** ≥50 % (DIN EN ISO 527)
- **Elastic modulus:** ≥950 N/mm² (DIN EN ISO 527)
- **Impact strength:** 11 MJ/mm² (DIN EN ISO 179)
- **Shore hardness D:** 70° (DIN EN ISO 868)
- **Volume resistivity:** 10^{16} Ohm x cm (VDE 0303/3)
- **Surface resistivity:** 10^{13} Ohm (VDE 0303/3)
- **Tolerance:** DIN ISO 3302-1 E2





Item	Thickness mm	Dimensions mm	Unit piece	Price EURO
300036	0.5	500 x 500	1	43.00
300037	1	500 x 500	1	48.00
300038	1.5	500 x 500	1	51.00
300039	2	500 x 500	1	55.00
300040	3	500 x 500	1	58.00
300041	0.5	1,000 x 1,000	1	66.00
300042	1	1,000 x 1,000	1	74.00
300043	1.5	1,000 x 1,000	1	85.00
300044	2	1,000 x 1,000	1	92.00
300045	3	1,000 x 1,000	1	100.00

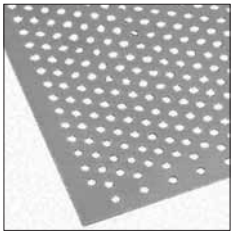
THOMAPLAST®-Perforated Plate made of PP - light-beige

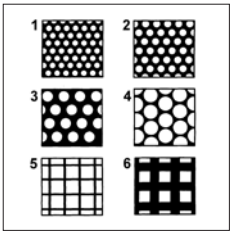
Product specification

- Plate made of perforated polypropylene with different kinds of perforations
- High bending strength
- Extremely good impact toughness and notch impact strength
- Highest fatigue resistance also at higher temperatures
- Best temperature resistance
- Good chemical properties, particularly to oils, petrols and acids
- Ideal material for use as structural plate in a corrosive environment, for electrical and thermal insulations, also usable for mechanical separation (separation lattice) in chemical pans, battery boxes, covers etc.

Technical specification

- **Material:** PP (polypropylene)
- **Colour:** light-beige
- **Temperature range:** -5 to +100 °C, for a short time +120 °C
- **Density:** 0.91 g/cm³ (DIN 53479)
- **Tearing strength:** 36 MPa (DIN 53455)
- **Notch impact strength:** 8 kJ/m² (DIN 53455)
- **Rockwell hardness:** 75 Mpa (DIN 53456)
- **Elastic modulus:** 1,350 Mpa (DIN 53457)
- **Volume resistivity:** >10^{16} Ohm x cm (DIN 53482)
- **Surface resistivity:** 10^{13} Ohm/cm² (DIN 53482)
- **Dielectric strength:** 70 kV/mm (DIN 53481)
- **Thickness:** 2 mm



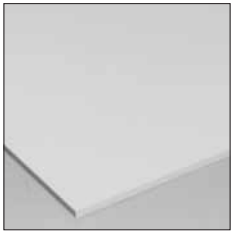


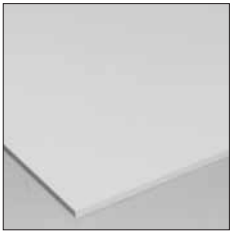
Item	Type	Open area %	Arrangement	Dimensions mm	Unit piece	Price EURO
300537	1	33	60°, Ø 3.0 mm	500 x 500	1	100.00
300538	2	50	60°, Ø 4.8 mm	500 x 500	1	100.00
300539	3	43	60°, Ø 6.4 mm	500 x 500	1	100.00
300540	4	68	60°, Ø 8.0 mm	500 x 500	1	100.00
300541	5	35	square, 4.7 x 4.7 mm	500 x 500	1	100.00

THOMAPLAST®-Plate made of PS

Product specification

- High-impact proof polystyrene based on styrene butadiene
- Outstanding hardness and stiffness
- Remarkable resistance to lowest temperatures
- High dimensional stability in heat
- Good stress cracking resistance
- Very good mechanical and dielectric properties
- Good resistance to aging
- Not resistant to weather
- Not usable for sliding functions
- Good chemical resistance to acids and alkalis, limited stability to oils, not stable to petrols





Technical specification

- **Material:** PS (polystyrene)
- **Colour:** white
- **Temperature range:** -60 to +70°C
- **Density:** 1.05 g/cm^3
- **Tensile strength:** 17 MPa
- **Fire classification:** UL 94 HB
- **Volume resistivity:** 10^{16} Ohm x cm
- **Breakdown strength:** 155 kV/mm
- **Ball-pressure hardness:** 80 N/mm^2
- **Limiting bending stress:** 39 N/mm^2
- **Elongation at break:** >30 %
- **Yield stress:** 17 N/mm^2
- **Impact toughness:** at 23 °C: >30 kJ/m^2, at -30 °C: 30 kJ/m^2 (DIN 53453)
- **Notch impact strength:** at 23 °C: 6 kJ/m^2, at -30 °C: 5 kJ/m^2 (DIN 53453)
- **Special features:** strongly resistant to cold, impact-proof
- **Tolerance:** DIN ISO 3302-1 E2

Item	Thickness mm	Dimensions mm	Unit piece	Price EURO
300046	0.5	500 x 500	1	43.00
300047	0.8	500 x 500	1	48.00
300048	1	500 x 500	1	51.00
300049	1.5	500 x 500	1	55.00
300050	2	500 x 500	1	58.00
300051	3	500 x 500	1	63.00
300052	0.5	1,000 x 1,000	1	66.00
300053	0.8	1,000 x 1,000	1	74.00
300054	1	1,000 x 1,000	1	80.00
300055	1.5	1,000 x 1,000	1	88.00
300056	2	1,000 x 1,000	1	95.00
300057	3	1,000 x 1,000	1	106.00

THOMAPLAST®-Plate made of PTFE (virgin)

Product specification

- Heavy-duty plastic
- Very good chemical resistance to any organic and inorganic media
- No water absorption
- Very good temperature resistance
- Outstanding coefficient of sliding friction
- Excellent resistance to weather
- Antiadhesive surface
- Very low friction values
- Very good dielectric properties independent of frequency and temperature
- Very good electrical insulating capacity also at air humidity
- Non-combustible
- High tracking resistance
- Highest gas-tightness
- Resistant to stress cracks
- High-quality technical plastic for chemical apparatus construction, process engineering, machine construction, and electrical engineering
- Use in machine building and precision mechanical engineering: packings, piston rings, slide bearings, thread sealing tapes
- Use in chemical industry: packings, pumps, valves, filter bodies, heat exchanger, laboratory devices
- Use in electrical engineering: insulators in heavy current engineering and HF technology, line switches, tube sockets

Technical specification

- **Material:** PTFE (polytetrafluoroethylene)
- **Colour:** white
- **Shore hardness D:** 55° - 59° (DIN 53505)
- **Special features:** non-combustible, very good resistance to weather
- **Temperature range:** -200 to +260 °C, for a short time +280 °C
- **Melting point:** +320 °C
- **Density:** 2.15 - 2.18 g/cm^3 (DIN 53479)
- **Tensile strength:** 20 - 40 N/mm^2 (DIN 53455)
- **Elongation at break:** 250 - 500 % (ASTM D638)
- **Notch impact strength:** 16 kJ/m^2
- **Pressure resistance:** 3.9 - 4.4 N/mm^2 (1 % deformation at +23 °C)
- **Thermal conductivity:** 0.26 W/K x m (ASTM C 117)
- **Dielectric constant:** 2.1 at 50 Hz (DIN 53483)
- **Tolerance:** DIN ISO 3302-1 E2

Item	Thickness mm	Dimensions mm	Unit piece	Price EURO
300174	1	300 x 300	1	81.00
300175	1	600 x 600	1	151.00
300176	1	1,200 x 1,200	1	276.00
300177	1.2	600 x 600	1	183.00
300178	1.2	1,200 x 1,200	1	340.00
300179	1.5	300 x 300	1	109.00
300180	1.5	600 x 600	1	201.00
300181	1.5	1,200 x 1,200	1	376.00
300182	2	300 x 300	1	99.00
300183	2	600 x 600	1	215.00
300184	2	1,200 x 1,200	1	404.00
300185	2.5	300 x 300	1	135.00
300186	2.5	600 x 600	1	258.00
300187	2.5	1,200 x 1,200	1	490.00
47963	3	300 x 300	1	127.00
300188	3	600 x 600	1	298.00
300189	3	1,200 x 1,200	1	570.00
47964	4	300 x 300	1	146.00
300190	4	600 x 600	1	323.00
300191	4	1,000 x 1,000	1	554.00
47965	5	300 x 300	1	172.00
47973	5	600 x 600	1	396.00
300192	5	1,000 x 1,000	1	701.00
47966	6	300 x 300	1	203.00
300193	6	600 x 600	1	458.00
300194	6	1,000 x 1,000	1	796.00
47967	8	300 x 300	1	242.00
47974	8	600 x 600	1	485.00
300195	8	1,000 x 1,000	1	1,002.00
47968	10	300 x 300	1	289.00
47975	10	600 x 600	1	604.00
300196	10	1,000 x 1,000	1	1,250.00
300197	12	300 x 300	1	304.00
300198	12	600 x 600	1	885.00
300199	12	1,000 x 1,000	1	1,499.00
47969	15	300 x 300	1	374.00
300200	15	600 x 600	1	1,107.00
300201	15	1,000 x 1,000	1	1,877.00
47970	20	300 x 300	1	393.00
47978	20	600 x 600	1	914.00
300202	20	1,000 x 1,000	1	2,463.00
47971	25	300 x 300	1	485.00
300203	25	600 x 600	1	1,142.00
300204	25	1,000 x 1,000	1	3,079.00
47972	30	300 x 300	1	577.00
300205	30	600 x 600	1	1,364.00
300206	30	1,000 x 1,000	1	3,696.00
300207	40	300 x 300	1	763.00
300208	50	300 x 300	1	958.00

THOMAPLAST®-Plate made of PTFE (expanded)

Application area

- Machine engineering, precision engineering, process technology, electrical engineering, chemical apparatus construction

Product specification

- Sealing plate made of 100 % pure expanded PTFE
- Microcellular structure
- For manufacturing of gaskets and sealing tapes without pre-fabrication
- Particularly suited also for sealing of small surfaces
- Good creep and cold flow properties
- Evening-up of surface irregularities (due to the soft structure), thus surface pretreatment of components is not necessary
- High resistance to pressure
- Capable of being cut and punched after adhesive bonding
- Absolutely resistant to inorganic and organic solutions, even to aqua regia
- Highly resistant to all alkalis, alkohols, ketones, gasolines and oils
- Not stable to dissolved and molten alkali metals and oxidizing agents such as elemental fluorine at higher temperatures
- Excellent resistance to weather
- Good resistance to aging
- The plates are also available self-adhesive on one side

Technical specification

- **Material:** PTFE (polytetrafluoroethylene) - expanded fibre structure
- **Colour:** white
- **Temperature range:** -240 to +260 °C; for a short time up to +315 °C
- **Density:** 0.75 g/cm^3
- **Regulations:** FDA § 21 CFR 177.1550

Item	Thickness mm	Dimensions mm	Unit piece	Price EURO
302010	1	450 x 500	1	144.00
302011	2	450 x 500	1	224.00
302012	3	450 x 500	1	268.00
302013	4	450 x 500	1	330.00
302014	6	450 x 500	1	438.00
302015	1	900 x 500	1	288.00
302016	2	900 x 500	1	452.00
302017	3	900 x 500	1	536.00
302018	4	900 x 500	1	660.00
302019	6	900 x 500	1	872.00

THOMAPLAST®-Plate made of PVC (rigid) - crystal-clear

Product specification
- High stiffness and dimensional stability
- Good mechanical stability
- Best impact strength
- Very good dielectrical properties
- Flame-resistant
- Good resistance to aging and weather
- Not usable for slid functions
- Risk of breakage at low temperatures
- For weldments in laboratory and container building as well as for static parts in machine construction and in electrical engineering
- Good chemical resistance, especially to petrol and oils

Technical specification
- **Material:** rigid PVC (rigid polyvinyl chloride)
- **Colour:** crystal-clear
- **Temperature range:** -35 to +60 °C, for a short time +70 °C
- **Density:** 1.31 g/cm^3
- **Tensile impact toughness:** >650 kJ/m^2
- **Tensile strength:** 47 N/mm^2
- **Tolerance:** DIN ISO 3302-1 E2

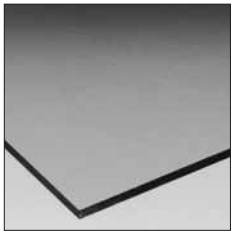
Item	Thickness mm	Dimensions mm	Unit piece	Price EURO
19958	0.2	500 x 500	1	43.00
19959	0.25	500 x 500	1	48.00
19960	0.3	500 x 500	1	51.00
19962	0.5	500 x 500	1	58.00
19963	0.8	500 x 500	1	62.00
19964	1	500 x 500	1	65.00
19965	1.5	500 x 500	1	68.00
19966	2	500 x 500	1	70.00
19967	2.5	500 x 500	1	72.00
19968	3	500 x 500	1	79.00
19969	0.2	1,000 x 1,000	1	66.00
19970	0.25	1,000 x 1,000	1	74.00
19971	0.3	1,000 x 1,000	1	79.00
19973	0.5	1,000 x 1,000	1	95.00
19974	0.8	1,000 x 1,000	1	105.00
19975	1	1,000 x 1,000	1	109.00
19976	1.5	1,000 x 1,000	1	115.00
19977	2	1,000 x 1,000	1	129.00
19978	2.5	1,000 x 1,000	1	137.00
19979	3	1,000 x 1,000	1	145.00

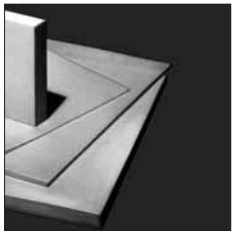
THOMAPLAST®-Plate made of PVC (rigid) - transparent

Application area
- Transparent components such as protective devices or observation windows (lower optical quality than PMMA)

Product specification
- High mechanical stability
- UV-stabilized
- Hardly inflammable
- Good chemical resistance
- Hot formable
- Bondable and weldable

Technical specification
- **Material:** rigid PVC (rigid polyvinyl chloride)
- **Colour:** transparent with blue cast
- **Design:** extruded and calendered, protective foil on both sides
- **Density:** 1.37 g/cm^3
- **Temperature range:** 0 to +60 °C, for a short time +75 °C





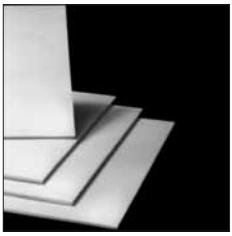
Item	Thickness mm	Tolerance mm	Dimensions mm	Unit piece	Price EURO
302163	2	± 0.14	500 x 500	1	45.00
302164	2	± 0.14	500 x 1,000	1	68.00
302165	3	± 0.17	500 x 500	1	66.00
302166	3	± 0.17	500 x 1,000	1	99.00
302167	4	± 0.20	500 x 500	1	86.00
302168	4	± 0.20	500 x 1,000	1	132.00
302169	5	± 0.23	500 x 500	1	111.00
302170	5	± 0.23	500 x 1,000	1	166.00
302171	6	± 0.26	500 x 500	1	115.00
302172	6	± 0.26	500 x 1,000	1	184.00
302173	8	± 0.32	500 x 500	1	132.00
302174	8	± 0.32	500 x 1,000	1	220.00

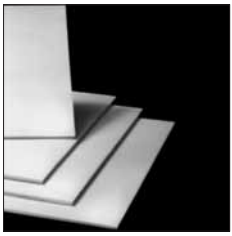
THOMAPLAST®-Plate made of PVC (rigid) - light-grey

Product specification
- High stiffness and dimensional stability
- High mechanical stability
- Best impact strength
- Very good dielectrical properties
- Flame-resistant
- Good resistance to aging and weather
- Not usable for slid functions
- Risk of breakage at low temperatures
- For weldments in laboratory and container building as well as for static parts in machine construction and in electrical engineering
- Good chemical resistance, especially to petrol and oils

Technical specification

- **Material:** rigid PVC (rigid polyvinyl chloride)
- **Colour:** light-grey
- **Temperature range:** -15 to +60 °C, for a short time +70 °C
- **Density:** 1.39 g/cm^3
- **Tensile impact toughness:** >320 MJ/mm^2
- **Tensile strength:** >50 N/mm^2
- **Tolerance:** DIN ISO 3302-1 E2



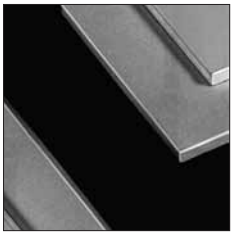


Item	Thickness mm	Dimensions mm	Unit piece	Price EURO
19980	0.2	500 x 500	1	43.00
19981	0.4	500 x 500	1	48.00
19982	1	500 x 500	1	51.00
19983	1.5	500 x 500	1	55.00
19984	2	500 x 500	1	58.00
19985	2.5	500 x 500	1	62.00
19986	3	500 x 500	1	65.00
19987	4	500 x 500	1	69.00
19988	5	500 x 500	1	76.00
19989	0.2	1,000 x 1,000	1	66.00
19990	0.4	1,000 x 1,000	1	74.00
19991	1	1,000 x 1,000	1	80.00
19992	1.5	1,000 x 1,000	1	88.00
19993	2	1,000 x 1,000	1	95.00
19994	2.5	1,000 x 1,000	1	104.00
19995	3	1,000 x 1,000	1	109.00
19996	4	1,000 x 1,000	1	117.00
19997	5	1,000 x 1,000	1	131.00

THOMAPLAST®-Plate made of PVDF

Application area

- Used in chemical apparatus and machine building, especially in the petrochemical, chemical, metallurgical, pharmaceutical, food processing, paper and textile industry as well as in the nuclear technology (pump carrying wheels, flanges, valve bodies etc.).



Product specification

- Heavy-duty plastic
- Very good chemical resistance, but limited compared to PTFE
- Outstanding hydrolysis resistance
- Good temperature resistance coupled with high operating temperature limit
- High impact toughness even at low temperatures
- Great hardness
- High mechanical stability, stiffness and creep strength (in this regard superior to other plastics)
- High heat-stability
- Thermoplasticly processable
- Good electrical insulating properties
- Very high dimensional stability
- Inherent flame-resistance
- Very good radiation resistance
- Outstanding UV and weather resistance
- Physiologically safe

Technical specification

- **Material:** PVDF (polyvinylidene fluoride)
- **Colour:** natural, translucent
- **Density:** 1.78 g/cm^3 (ISO 1183)
- **Temperature range:** -60 to +150 °C, for a short time +160 °C
- **Melting point:** +169 °C (ISO 3146)
- **Flammability rating:** UL 94 V-0 (at 1.5 or 3 mm thickness)
- **Thermal conductivity:** 0.19 W/K x m at +23 °C (DIN 52612)
- **Tensile strength:** 50 N/mm^2 (yield stress) (ISO 527-2)
- **Elongation at break:** >50 % (ISO 527-2)
- **Elastic modulus:** 2,000 N/mm^2 (ISO 527-2)
- **Notch impact strength:** 6 kJ/m^2 (ISO 179/1eA)
- **Rockwell hardness:** M 75 (ISO 2039-2)
- **Dielectric loss factor:**
  at 1 MHz: 0.165 (IEC 60250)
  at 100 Hz: 0.025 (IEC 60250)
- **Dielectric strength:** 20 kV/mm (IEC 60242-1)
- **Volume resistivity:** 10^{12} Ohm x m (IEC 60093)
- **Surface resistivity:** 10^{13} Ohm (IEC 60093)
- **Tolerance:** DIN ISO 3302-1 E2
- **Regulations:** according to BfR and FDA

Item	Thickness mm	Tolerance mm	Dimensions mm	Unit piece	Price EURO
300434	6	+0.2 / +0.7	300 x 500	1	309.00
300435	10	+0.2 / +0.9	300 x 500	1	344.00
300436	12	+0.3 / +1.5	300 x 500	1	416.00
300437	16	+0.3 / +1.5	300 x 500	1	536.00
300438	20	+0.3 / +1.5	300 x 500	1	622.00
300439	25	+0.3 / +1.5	300 x 500	1	708.00
300440	30	+0.5 / +2.5	300 x 500	1	812.00
300441	40	+0.5 / +2.5	300 x 500	1	970.00
300442	50	+0.5 / +2.5	300 x 500	1	1,196.00
300443	60	+0.5 / +3.5	300 x 500	1	1,707.00

Ceramic, Synthetic and Natural Materials

THOMAPLAST®-Glass Ceramic

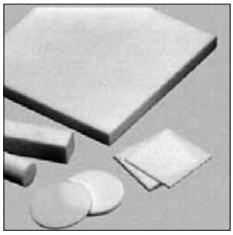
General product specification

- Highest temperature ceramic
- Absolute chemical resistance
- No uptake of humidity
- Non-porous
- Not deformable
- Great hardness
- Outstanding insulating material at high voltages, a high frequency range at high temperatures
- Achievable manufacturing tolerances up to 0.013 mm
- Achievable surface roughness >0.5 µm to 0.013 µm (polished)
- Processing can be done with usual metal processing tools for metal (metal cutting), thus purchase of expensive diamond tools is not necessary

General technical specification

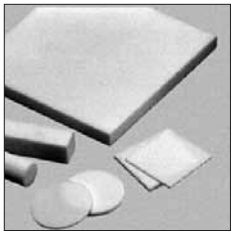
- **Material:** glass ceramic
- **Colour:** white
- **Temperature range:** -200 to +800 °C, for a short time +1,000 °C
- **Special features:** highest temperature loadability, great hardness, achievable manufacturing tolerances up to 0.013 mm
- **Expansion coefficient:**
  at -200 to +25 °C: 74 x 10^{-7} / °C;
  at +25 to +800 °C: 126 x 10^{-7} / °C
- **Specific heat (+25 °C):** 0.79 kJ/kg x K
- **Heat conduction (+25 °C):** 1.46 W/m °C
- **Heat diffusion (+25 °C):** 7.3 x 10^{-7} m^2/s
- **Density:** 2.52 g/cm^3
- **Porosity:** 0 %
- **Elastic modulus:** 66.9 GPa (Youngs modulus)
- **Shear modulus:** 25.5 GPa
- **Rockwell hardness:** M 48
- **Tensile strength:** 94 MPa (modulus of rupture)
- **Pressure resistance:** 345 MPa
- **Breaking strength:** 1.53 MPa M 0.5
- **Dielectric constant:** 6.03 at 1 kHz; 5.67 at 8.5 GHz
- **Dielectric strength (GS/WS):** 40 kV/mm at 0.01 thickness, +25 °C
- **GS-Volume resistivity:** >10^{16} Ohm/cm

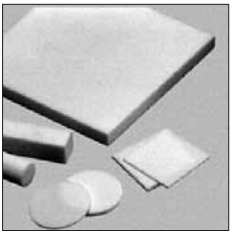
THOMAPLAST®-Glass Ceramic Plate



Item	Thickness mm	Dimensions mm	Unit piece	Price EURO
300533	3	100 x 100	1	369.00
300534	6	100 x 100	1	502.00
300535	10	100 x 100	1	599.00

THOMAPLAST®-Glass Ceramic Block





Item	Thickness mm	Dimensions mm	Unit piece	Price EURO
300529	10	100 x 10	1	195.00
300530	15	100 x 15	1	228.00
300531	20	100 x 20	1	266.00
300532	25	100 x 25	1	305.00

THOMAPLAST®-Glass Ceramic Test Package

Product specification

- Content: 1 round rod 10 x 50 mm; 1 block 10 x 10 x 25 mm; 1 plate 3 x 25 x 50 mm.

Item	Unit piece	Price EURO
300536	1	197.00

THOMAPLAST®-Aramid Plate

Product specification

- Packing material, free of asbestos
- Good resistance to aging
- Highest temperature resistance
- Resistance to hot steam and hot water, gases, salt solutions, fuels, alcohols, organic and inorganic acids, lubricants and cooling agents.

Technical specification

- **Material:** aramid fibres, bonded with NBR (KlingerSil®-C-4400)
- **Colour:** green (printed)
- **Max. temperature:** +400 °C
- **Density:** 1.6 g/cm^3 (DIN 53479)
- **Max. operating pressure:** 60 bar
- **Compressibility:** 11 % (ASTM F 36 A)
- **Resilience:** 50 % (ASTM F 36 A)
- **Pressure resistance:** 35 N/mm^2

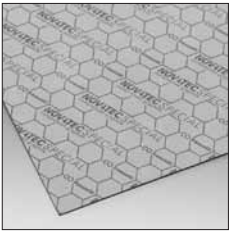
Item	Thickness mm	Dimensions mm	Unit piece	Price EURO
300665	0.3	500 x 500	1	72.00
300666	0.5	500 x 500	1	79.00
300667	0.8	500 x 500	1	94.00
300668	1	500 x 500	1	108.00
300669	1.5	500 x 500	1	115.00
300670	2	500 x 500	1	140.00
300671	2.5	500 x 500	1	153.00
300672	3	500 x 500	1	170.00
300673	0.3	1.500 x 1,000	1	103.00
300674	0.5	1.500 x 1,000	1	133.00
300675	0.8	1.500 x 1,000	1	208.00
300676	1	1.500 x 1,000	1	223.00
300677	1.5	1.500 x 1,000	1	273.00
300678	2	1.500 x 1,000	1	361.00
300679	2.5	1.500 x 1,000	1	454.00
300680	3	1.500 x 1,000	1	529.00

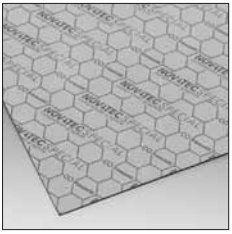
THOMAPLAST®-High-Tech Aramid/Graphite High-Temperature Packing Plate

Application area
- Hot water applications, hot steam applications

Product specification
- Good pressure stability
- Extremely high temperature load possible
- Very good resistance to oil and fuels
- Simultaneous load with maximum permissible values of pressure and temperature is not allowed during operation.

Technical specification
- **Material:** aramid fibres combined with graphite (graphite portion: 75 %)
- **Colour:** golden-yellow with black print
- **Max. temperature:** +360 °C, for a short time +400 °C
- **Density:** 1 g/cm^3 (DIN 53479)
- **Max. operating pressure:** max. 100 bar
- **Compressibility:** 45 % +/- 5 % (ASTM F 36 J)
- **Resilience:** <7 % (ASTM F 36 J)
- **Pressure resistance:** >38 N/mm^2 at +300 °C (DIN 52913)
- **Cold elastic recovery:** 2.5 % (DIN 28090-2)
- **Heat elastic recovery:** 1 % (DIN 28090-2)
- **Design:** antiadhesive coating on both sides
- **Regulations:** KTW, WRC, gas leakage DIN 3535 Part 4 <7 ml/min.



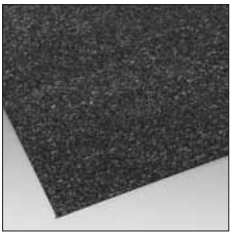


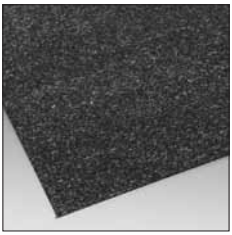
Item	Thickness mm	Tolerance mm	Dimensions mm	Unit piece	Price EURO
300943	1	±0.1	375 x 750	1	105.00
300944	1.5	±0.2	375 x 750	1	121.00
300945	2	±0.2	375 x 750	1	133.00
300946	3	±0.2	375 x 750	1	215.00
300948	1	±0.1	750 x 750	1	156.00
300949	1.5	±0.2	750 x 750	1	169.00
300950	2	±0.2	750 x 750	1	187.00
300951	3	±0.2	750 x 750	1	294.00

THOMAPLAST®-Slap Cork Plate

Product specification
- Insulating material
- Vibration gasket
- Packing material
- Good resistance to aging and weather
- Outstanding resistance to ozone
- Good resistance to petrol and oils as well as to acids and alkalis

Technical specification
- **Material:** cork, PUR-bonded
- **Colour:** brown
- **Max. temperature:** +110 °C
- **Density:** 0.55 g/cm^3 (DIN 53479)
- **Resilience:** 70 % (ASTM F 36 B)
- **Tensile strength:** 5 - 15 % at 300 psi



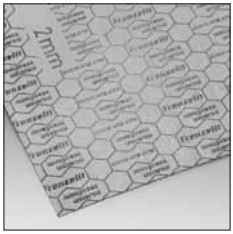


Item	Thickness mm	Dimensions mm	Unit piece	Price EURO
300747	1	500 x 500	1	69.00
300748	1.5	500 x 500	1	72.00
300749	2	500 x 500	1	75.00
300750	2.5	500 x 500	1	79.00
300751	3	500 x 500	1	83.00
300752	1	1,000 x 1,000	1	86.00
300753	1.5	1,000 x 1,000	1	90.00
300754	2	1,000 x 1,000	1	105.00
300755	2.5	1,000 x 1,000	1	115.00
300756	3	1,000 x 1,000	1	124.00

THOMAPLAST®-Synthetic Plate

Product specification
- Packing material, free of asbestos
- Fitted with stretch metal insert
- Increased structural stability up to 1.5 mm thickness
- Good resistance to aging
- Highest temperature resistance
- Resistance to steam, gases, salt solutions, fuels, alcohols, organic and inorganic acids, lubricants and cooling agents.

Technical specification
- **Material:** synthetic fibres, bonded with NBR (KlingerSil®-C-4409)
- **Colour:** green
- **Max. temperature:** +400 °C
- **Density:** 2.0 g/cm³ (DIN 53479)
- **Max. operating pressure:** 80 bar
- **Compressibility:** 7 % (ASTM F 36 A)
- **Resilience:** 55 % (ASTM F 36 A)
- **Pressure resistance:** 25 N/mm²
- **Regulations:** HTB, KTW, WRC, BAM, CUVV 28, Din-DVGW-88.01e052, BS 7531 Grade y, oxygen (VGB 62) at 100 bar/+80 °C

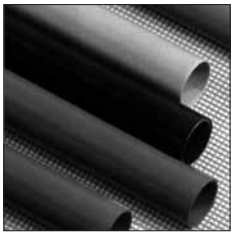


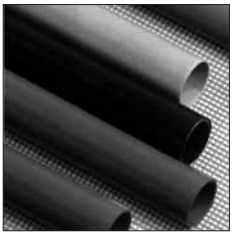
Item	Thickness mm	Dimensions mm	Unit piece	Price EURO
300681	0.8	500 x 500	1	99.00
300682	1	500 x 500	1	111.00
300683	1.5	500 x 500	1	126.00
300684	2	500 x 500	1	130.00
300685	3	500 x 500	1	184.00
300686	0.8	1.500 x 1,000	1	244.00
300687	1	1.500 x 1,000	1	281.00
300688	1.5	1.500 x 1,000	1	328.00
300689	2	1.500 x 1,000	1	444.00
300690	3	1.500 x 1,000	1	639.00

THOMAPLAST®-Vulcanized Fibre Plate

Product specification
- High mechanical stability
- Outstanding resistance to aging
- Best mechanical strength
- Resistance to oils, fats and petrol, many organic solvents, but only of limited resistance to acids and alkalis.

Technical specification
- **Material:** vulcanized fibre
- **Colour:** red
- **Max. temperature:** +90 °C
- **Density:** 1.3 g/cm³
- **Regulations:** KTW approval (D1 and D2)





Item	Thickness mm	Dimensions mm	Unit piece	Price EURO
300691	0.5	500 x 500	1	51.00
300692	0.8	500 x 500	1	54.00
300693	1	500 x 500	1	58.00
300694	1.5	500 x 500	1	61.00
300695	2	500 x 500	1	71.00
300696	2.5	500 x 500	1	79.00
300697	3	500 x 500	1	86.00
300698	0.5	1,000 x 1,000	1	62.00
300699	0.8	1,000 x 1,000	1	76.00
300700	1	1,000 x 1,000	1	86.00
300701	1.5	1,000 x 1,000	1	97.00
300702	2	1,000 x 1,000	1	132.00
300703	2.5	1,000 x 1,000	1	147.00
300704	3	1,000 x 1,000	1	166.00

Metals

THOMASTABIL®-Plate made of Aluminum

Product specification
- Medium-strong alloy of good stability
- Corrosion-proof
- For manufacturing of cases, plates, chassis etc.
- Material standard BS 1479 SIC (1987)
- Material: AlBS 1474

Item	Thickness mm	Dimensions mm	Unit piece	Price EURO
300594	1.2	200 x 300	1	25.00
300595	2	300 x 500	1	48.00
300596	3	300 x 500	1	83.00
300597	6	300 x 500	1	137.00

THOMASTABIL®-Plate made of Stainless Steel

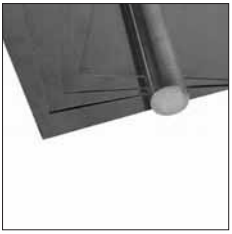
Product specification
- Seamless type 316L according to ASTM 269
- Austenitic, corrosion-proof and antimagnetic steel
- Easy to process and to polish
- Improvement of mechanical properties by cold processing
- Typical use in chemical engineering, food processing, gas and oil industries, in hospital engineering and in vehicle construction, wherever corrosion resistance is required.

Item	Thickness mm	Dimensions mm	Unit piece	Price EURO
300577	1	500 x 300	1	90.00
300578	1.2	500 x 300	1	111.00
300579	1.5	500 x 300	1	114.00
300580	2.5	500 x 300	1	164.00
300581	3	500 x 300	1	181.00

THOMASTABIL®-Plate made of Copper

Product specification
- Highly conductive
- Corrosion-proof
- Formable as solid rod, pipe or sheet
- Material standard BS 2870/C 101 (1980)

Technical specification
- **Analysis for copper:** 99.90 %, lead 0.005 %, bismuth 0.001 %
- **Tensile strength:** 240 N/mm^2 (for solid rods and sheets)



Item	Thickness mm	Dimensions mm	Unit piece	Price EURO
300567	0.35	300 x 300	1	51.00
300568	0.45	300 x 300	1	56.00

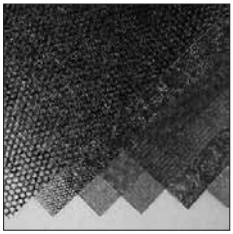
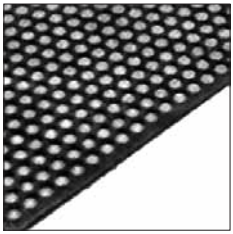
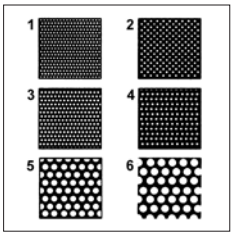
THOMASTABIL®-Plate made of Brass

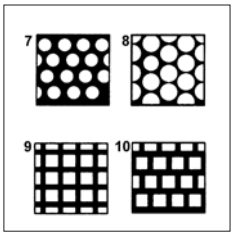
Product specification
- Machine quality
- Turned material
- Processing to bolts, gearwheels etc.

Item	Thickness mm	Dimensions mm	Unit piece	Price EURO
300556	0.3	300 x 600	1	92.00
300557	0.6	300 x 600	1	119.00
300558	0.8	300 x 600	1	143.00
300559	1	300 x 600	1	176.00
300560	1.6	300 x 600	1	202.00

THOMASTABIL®-Screen Plate made of Aluminum

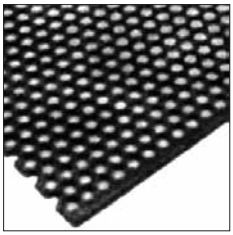
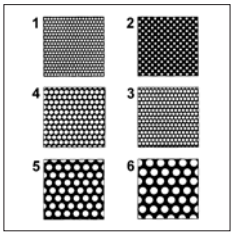
Product specification
- Perforated plate made of aluminum (3103 H14)
- Closed longitudinal edges
- Untreated surface
- Corrosion-proof and antimagnetic



Item	Type	Open area %	Arrangement	Thick-ness mm	Dimensions mm	Price EURO
300625	1	42	60°, Ø 1.2 mm	0.6	500 x 500	78.00
300626	2	22	45°, Ø 1.5 mm	0.6	500 x 500	78.00
300627	3	45	60°, Ø 1.7 mm	0.6	500 x 500	78.00
300628	4	47	60°, Ø 2.0 mm	1.2	500 x 500	90.00
300629	5	33	60°, Ø 3.0 mm	1.2	500 x 500	90.00
300630	6	50	60°, Ø 4.8 mm	1.2	500 x 500	90.00
300631	7	43	60°, Ø 6.4 mm	1.2	500 x 500	90.00
300632	8	68	60°, Ø 8.0 mm	1.2	500 x 500	90.00
300633	9	62	square, 6 x 6 mm	1.2	500 x 500	90.00
300634	10	52	square, 10 x 10 mm	1.2	500 x 500	90.00

THOMASTABIL®-Screen Plate made of Steel Sheets

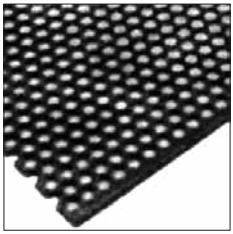
Product specification
- Zinc-plated, perforated steel sheet
- Can be overpainted by brushing after degreasing
- Application as filter screen and supporting plate in process engineering, as protective device in apparatus construction.

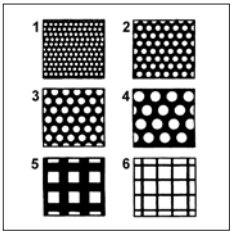
Item	Type	Open area %	Arrangement	Thickness mm	Dimensions mm	Price EURO
300610	1	42	60°	0.7	500 x 500	70.00
300611	2	22	45°	0.7	500 x 500	70.00
300612	3	45	60°	0.7	500 x 500	70.00
300613	4	47	60°	0.7	500 x 500	70.00
300614	5	33	60°	0.7	500 x 500	70.00
300615	6	50	60°	0.7	500 x 500	70.00
300616	7	43	60°	0.7	500 x 500	70.00
300617	8	68	60°	0.7	500 x 500	70.00

THOMASTABIL®-Screen Plate made of Stainless Steel

Application area
- Application in the food processing industry, in chemical engineering, gas and mineral oil industries as well as in sanitary and hospital engineering, wherever highest corrosion protection is required.

Product specification
- Perforated plate made of stainless steel
- Closed edges
- Austenitic, antimagnetic design (SS 316)
- High corrosion resistance





Item	Type	Open area %	Arrangement	Dimensions mm	Thickness mm	Price EURO
300618	1	47	60°, Ø 2.0 mm	500 x 500	0.55	105.00
300619	2	33	60°, Ø 3.0 mm	500 x 500	0.55	105.00
300620	3	50	60°, Ø 4.8 mm	500 x 500	0.55	105.00
300621	4	43	60°, Ø 6.4 mm	500 x 500	0.55	105.00
300622	5	35	square, 4.7 x 4.7 mm	500 x 500	0.55	105.00
300623	6	62	square, 6 x 6 mm	500 x 500	0.55	105.00
300624	7	52	staggered, 6 x 6 mm	500 x 500	0.55	105.00

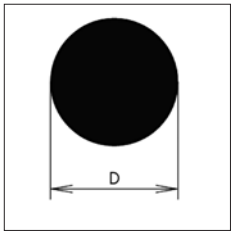
Welding Wires (2.0 - 3.5 mm)

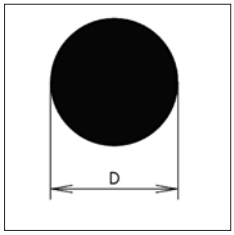
THOMAPLAST®-Welding Wire made of HDPE

Item	Outside Ø mm	Tolerance mm	Length mm	Unit piece	Price EURO
302062	3	+0.3 / +0.1	1,000	3	21.00
302063	3	+0.3 / +0.1	1,000	6	30.00
302064	3	+0.3 / +0.1	1,000	12	48.00

THOMAPLAST®-Welding Wire made of PP - pebble grey

Application area
- For hot gas welding of plates, round rods and pipes made of PP (same melt index).





Item	Outside Ø mm	Tolerance mm	Length mm	Unit piece	Price EURO
302090	3	+0.3 / +0.1	1,000	3	24.00
302091	3	+0.3 / +0.1	1,000	6	30.00
302092	3	+0.3 / +0.1	1,000	12	54.00

THOMAPLAST®-Welding Wire made of PVC (rigid)

Technical specification
- **Material:** rigid PVC (rigid polyvinyl chloride)
- **Colour:** grey
- **Design:** extruded
- **Density:** 1.42 g/cm^3
- **Temperature range:** 0 to +60 °C, for a short time +75 °C

Item	Outside Ø mm	Length mm	Unit piece	Price EURO
302059	3	1,000	3	18.00
302060	3	1,000	6	30.00
302061	3	1,000	12	48.00

THOMAPLAST®-High-Chem Welding Wire made of MFA

Product specification
- MFA is a newly developed fluorinated plastic, highly resistant and suitable for extreme mechanical and thermal loads
- Lowest embrittlement at temperature load
- High resistance to weathering
- Very good mechanical stability from lowest temperatures up to +250 °C
- Volume resistivity, dielectric constant and loss factor independently of the temperature
- Outstanding thermal stability (weight loss <0.3 % at +380 °C, 50 min. in air)
- Non-oxidizing

Technical specification
- **Material:** MFA (modified fluoralkoxy), (copolymer of tetrafluoroethylene and perfluoromethylvinylether)
- **Colour:** natural
- **Density:** 2.12 - 2.17 g/cm^3
- **Temperature range:** -70 to +240 °C
- **Melting point:** +290 °C
- **Embrittlement temperature:** -80 °C
- **Coefficient of sliding friction against steel (dry):** 0.1 - 0.2
- **Tearing strength:** 28 - 36 N/mm^2 at +23 °C; 15 - 21 N/mm^2 at +150 °C; 6 - 8 N/mm^2 at +250 °C
- **Shore hardness D:** 59° (DIN 53505)
- **Buckling strength 0.3 mm (cycles):** 70,000 - 100,000
- **Coefficient of thermal expansion:** at +23 to +150 °C (1/K) 12 - 20 x 10^{-5}
- **Water absorption:** <0.03 %
- **Oxygen index:** >95 %
- **Flammability rating:** UL 94 V-0
- **Dielectric constant:** 2.0 at 50 Hz
- **Volume resistivity:** >10^{16} Ohm x cm
- **Surface resistivity:** >10^{17} Ohm/cm^2
- **Dielectric strength:** 34 - 38 kV (thickness 1 mm)

Item	Outside Ø mm	Length m	Unit piece	Price EURO
338195	2	10	1	126.00
338196	2	30	1	302.00
338197	3	5	1	128.00
338198	3	15	1	306.00
338199	3.5	5	1	168.00
338200	3.5	15	1	408.00

THOMAPLAST®-High-Chem Welding Wire made of PFA

Product specification
- Highest temperature resistance of all meltable fluorinated plastics
- Very high dimensional stability under heat
- Flame-resistant
- Very high resistance to media
- Extremely high resistance to weather
- Low friction coefficient

Technical specification
- **Material:** PFA (perfluoralkoxy)
- **Colour:** natural
- **Density:** 2.15 g/cm^3
- **Temperature range:** -200 to +260 °C
- **Melting point:** +310 °C
- **Embrittlement temperature:** -270 °C
- **Coefficient of sliding friction against steel (dry):** 0.2 - 0.3
- **Tearing strength:**
  at +23 °C: 27 - 32 N/mm^2
  at +150 °C: 15 - 21 N/mm^2
  at +250 °C: 14 - 15 N/mm^2
- **Shore hardness D:** 55° (DIN 53505)
- **Buckling strength 0.18 - 0.20 mm (cycles):** 500,000
- **Coefficient of thermal expansion:** at +23 to +150 °C (1/K) 14 - 18 x 10^{-5}
- **Water absorption:** <0.03 %
- **Oxygen index:** >95 %
- **Flammability rating:** UL 94 V-0
- **Dielectric constant:** 2.03 at 50 Hz
- **Volume resistivity:** >10^{16} Ohm x cm
- **Surface resistivity:** >10^{17} Ohm/cm^2
- **Dielectric strength:** 20 kV (thickness 3.2 mm)

Item	Outside Ø mm	Length m	Unit piece	Price EURO
338201	2	10	1	136.00
338202	2	30	1	330.00
338203	3	5	1	134.00
338204	3	15	1	328.00
338205	3.5	5	1	178.00
338206	3.5	15	1	434.00

THOMAPLAST®-High-Chem Welding Wire made of PVDF

Application area
- Used in chemical apparatus and machine building, especially in the petrochemical, chemical, metallurgical, pharmaceutical, food processing, paper and textile industry as well as in the nuclear technology (pump carrying wheels, flanges, valve bodies etc.).

Product specification
- Heavy-duty plastic
- Very good chemical resistance, but limited compared to PTFE
- Outstanding hydrolysis resistance
- Good temperature resistance coupled with high operating temperature limit
- High impact toughness even at low temperatures
- High mechanical stability, stiffness and creep strength (in this regard superior to other plastics)
- High heat-stability, great hardness
- Thermoplasticly processable
- Good electrical insulating properties
- Very high dimensional stability
- Inherent flame-resistance
- Very good radiation resistance
- Outstanding UV and weather resistance
- Physiologically safe

Technical specification
- **Material:** PVDF (polyvinylidene fluoride)
- **Colour:** natural, translucent
- **Density:** 1.78 g/cm^3 (ISO 1183)
- **Temperature range:** -60 to +150 °C, for a short time +160 °C
- **Melting point:** +169 °C (ISO 3146)
- **Flammability rating:** UL 94 V-0 (at 1.5 or 3 mm thickness)
- **Thermal conductivity:** 0.19 W/K x m at +23 °C (DIN 52612)
- **Tensile strength:** 50 N/mm^2 (yield stress) (ISO 527-2)
- **Elongation at break:** >50 % (ISO 527-2)
- **Elastic modulus:** 2,000 N/mm^2 (ISO 527-2)
- **Notch impact strength:** 6 kJ/m^2 (ISO 179/1eA)
- **Rockwell hardness:** M 75 (ISO 2039-2)
- **Dielectric loss factor:** at 1 MHz: 0.165 (IEC 60250), at 100 Hz: 0.025 (IEC 60250)
- **Dielectric strength:** 20 kV/mm (IEC 60242-1)
- **Volume resistivity:** 10^{12} Ohm x m (IEC 60093)
- **Surface resistivity:** 10^{13} Ohm (IEC 60093)
- **Tolerance:** DIN ISO 3302-1 E2
- **Regulations:** according to BfR and FDA

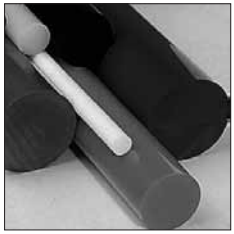
Item	Outside Ø mm	Length mm	Unit piece	Price EURO
302175	3	1,000	1	25.00
302176	3	1,000	2	43.00
302177	3	1,000	3	57.00

Rods (2 - 210 mm)
Elastomers, Plastics and Glass Ceramic

THOMAPLAST®-Solid Rod made of PA - tempered

Product specification
- Good mechanical stability
- Very good wear resistance
- Good impact toughness
- Good coefficient of sliding friction
- Good temperature resistance
- Good electrical insulating properties

Technical specification
- **Material:** PA 6 (polyamide)
- **Colour:** natural and black (material addition: MoS2 molybdenum sulphide)
- **Shore hardness D:** 72° - 82° (DIN 53505)
- **Temperature range:** -40 to +85 °C, for a short time +160 °C
- **Melting point:** +220 °C (DIN 53736)
- **Density:** 1.14 g/cm^3 (DIN 53479)
- **Tensile strength:** 78 N/mm^2 (DIN 53455)
- **Elongation at break:** >50 % (DIN 53455)
- **Notch impact strength:** 4 kJ/m^2 (DIN 53453)
- **Elastic modulus:** 3,100 N/mm^2 (DIN 53457)
- **Thermal conductivity:** 0.28 W/K x m (DIN 52612)
- **Dielectric constant:** 3.9 at 50 Hz (DIN 53483)
- **Volume resistivity:** 10^{15} Ohm x cm (DIN 53482)



Item	Outside Ø mm	Tolerance mm	Length mm	Colour	Unit piece	Price EURO
301719	6	+0.4 / +0.1	250	nature	4	22.00
301720	6	+0.4 / +0.1	500	nature	2	21.00
301721	6	+0.4 / +0.1	1,000	nature	1	21.00
301725	8	+0.5 / +0.1	250	nature	2	24.00
301726	8	+0.5 / +0.1	500	nature	1	24.00
301727	8	+0.5 / +0.1	1,000	nature	1	34.00
301728	10	+0.5 / +0.1	250	nature	1	16.00
301729	10	+0.5 / +0.1	500	nature	1	29.00
301730	10	+0.5 / +0.1	1,000	nature	1	47.00
301731	10	+0.5 / +0.1	250	black	1	16.00
301732	10	+0.5 / +0.1	500	black	1	29.00
301733	10	+0.5 / +0.1	1,000	black	1	47.00
301734	12	+0.7 / +0.2	250	nature	1	21.00
301735	12	+0.7 / +0.2	500	nature	1	34.00
301736	12	+0.7 / +0.2	1,000	nature	1	57.00
301737	15	+0.7 / +0.2	250	nature	1	29.00
301738	15	+0.7 / +0.2	500	nature	1	47.00
301739	15	+0.7 / +0.2	1,000	nature	1	72.00
301740	16	+0.7 / +0.2	250	black	1	29.00
301741	16	+0.7 / +0.2	500	black	1	47.00

Item	Outside Ø mm	Tolerance mm	Length mm	Colour	Unit piece	Price EURO
301742	16	+0.7 / +0.2	1,000	black	1	72.00
301743	18	+0.7 / +0.2	250	nature	1	36.00
301744	18	+0.7 / +0.2	500	nature	1	57.00
301745	18	+0.7 / +0.2	1,000	nature	1	90.00
301746	20	+0.7 / +0.2	250	nature	1	41.00
301747	20	+0.7 / +0.2	500	nature	1	64.00
301748	20	+0.7 / +0.2	1,000	nature	1	100.00
301749	20	+0.7 / +0.2	250	black	1	41.00
301750	20	+0.7 / +0.2	500	black	1	64.00
301751	20	+0.7 / +0.2	1,000	black	1	100.00
301752	25	+0.9 / +0.2	250	nature	1	57.00
301753	25	+0.9 / +0.2	500	nature	1	85.00
301754	25	+0.9 / +0.2	1,000	nature	1	126.00
301755	25	+0.9 / +0.2	250	black	1	57.00
301756	25	+0.9 / +0.2	500	black	1	85.00
301757	25	+0.9 / +0.2	1,000	black	1	126.00
301758	30	+0.9 / +0.2	250	nature	1	72.00
301759	30	+0.9 / +0.2	500	nature	1	100.00
301760	30	+0.9 / +0.2	1,000	nature	1	139.00
301761	30	+0.9 / +0.2	250	black	1	72.00
301762	30	+0.9 / +0.2	500	black	1	100.00
301763	30	+0.9 / +0.2	1,000	black	1	139.00
301764	40	+1.1 / +0.2	250	nature	1	116.00
301765	40	+1.1 / +0.2	500	nature	1	146.00
301766	40	+1.1 / +0.2	1,000	nature	1	177.00
301767	40	+1.1 / +0.2	250	black	1	116.00
301768	40	+1.1 / +0.2	500	black	1	146.00
301769	40	+1.1 / +0.2	1,000	black	1	177.00
301770	50	+1.3 / +0.3	250	nature	1	141.00
301771	50	+1.3 / +0.3	500	nature	1	174.00
301772	50	+1.3 / +0.3	1,000	nature	1	218.00
301773	50	+1.3 / +0.3	250	black	1	141.00
301774	50	+1.3 / +0.3	500	black	1	174.00
301775	50	+1.3 / +0.3	1,000	black	1	218.00

THOMAPLAST®-Solid Rod made of PC

Application area

- Precision parts in precision mechanics, safety glasswork, optical parts in general, insulating parts in electrical engineering, computer cases, parts coming into contact with food, elements for medical and pharmaceutical devices.

Product specification

- High mechanical stability
- Very high impact toughness, also at low temperatures
- Best temperature resistance
- Maintenance of stiffness in a broad temperature range
- Very high dimensional stability
- Resistance to weather
- Hardly inflammable
- Good electrical insulating properties
- Neutral in taste and odour
- Bondable and weldable
- Not usable for slid functions
- Physiologically safe (approved for use with food)
- Limited resistance to hydrolysis
- Technical plastic for impact-loaded transparent constructions in machine building and electrical engineering

Technical specification

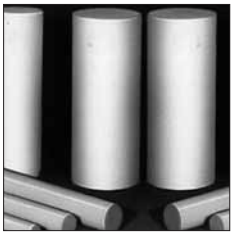
- **Material:** PC (polycarbonate)
- **Colour:** milky, colourless
- **Density:** 1.2 g/cm^3 (ISO 1183)
- **Temperature range:** -60 to +120 °C, for a short time +130 °C
- **Thermal conductivity:** 0.21 W/K x m (DIN 52612)
- **Flammability rating:** UL 94 HB
- **Tensile strength:** 70 N/mm^2 (ISO 527-2)
- **Elongation at break:** >50 % (ISO 527-2)
- **Elasticity modulus:** 2,400 N/mm^2 (ISO 527-2)
- **Rockwell hardness:** M 75 (ISO 20039-2)
- **Notch impact strength:** 9 KJ/m^2 (ISO 179/1eA)
- **Dielectric loss factor:**
  at 1 MHz: 0.009 (IEC 60250)
  at 100 Hz: 0.006 (IEC 60250)
- **Dielectric strength:** 29 kV/mm (IEC 60243-1)
- **Volume resistivity:** 10^{13} Ohm x m (IEC 60093)
- **Surface resistivity:** 10^{15} Ohm (IEC 60093)
- **Regulations:** according to BfR and FDA

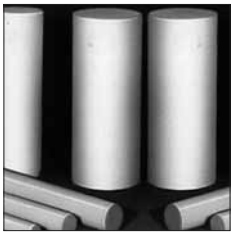
Item	Outside Ø mm	Tolerance mm	Length mm	Unit piece	Price EURO
300444	6	+0.1 / +0.4	500	1	14.00
300445	8	+0.1 / +0.5	500	1	15.00
300446	10	+0.1 / +0.5	500	1	17.00
300447	12	+0.2 / +0.9	500	1	25.00
300449	20	+0.2 / +0.9	500	1	45.00
300450	25	+0.2 / +1.2	500	1	64.00
300451	30	+0.2 / +1.2	500	1	76.00
300452	40	+0.2 / +1.6	500	1	125.00
300453	50	+0.3 / +2.0	500	1	172.00

THOMAPLAST®-Solid Rod made of PCTFE

Application area

- Cryogenics, chemistry, nuclear technology, medical engineering, electrical engineering





Product specification

- PCTFE has a significantly greater hardness and dimensional stability compared to PTFE
- PCTFE is the most rigid of all fluorinated plastics
- Extremely low permeability to gas
- PCTFE preserves its dimensional stability also at higher minus temperatures (-255 °C)
- Excellent radiation resistance, resistant to UV-rays and X-rays
- Remarkable chemical resistance to strong mineral acids (such as fuming nitric acid and hydrofluoric acid as well as aggressive reagents and concentrated sodium) and a lot of organic compounds
- Extremely wide temperature range
- Very good mechanical stability, lowest creep particularly at pressure load
- Flame-resistant even at high oxygen concentration (limit „oxygen index“ 100%)
- Extremely high resistance to aging
- Not permeable to steam and water
- Not permeable to fluid even at lowest temperatures

Technical specification

- **Material:** PCTFE (polychlorotrifluoroethylene)
- **Colour:** natural, translucent
- **Shore hardness D:** 75° - 80° (ASTM D 676)
- **Temperature range:** -255 to +150 °C, for a short time +200 °C
- **Density (amorphous):** 2.10 - 2.16 g/cm^3 (ASTM D 1050-68)
- **Tensile strength:**
  at +23 °C: 32 - 40 MPa (ASTM D 638-80)
  at +120 °C: 13 - 16 MPa (ASTM D 638-80)
- **Elongation at break:** 100 - 250 % (ASTM D 638-80)
- **Pressure resistance:** 40 - 45 MPa (ISO 604)
- **Surface resistivity:** 1.2 x 10^{18} Ohm/cm^2 (ASTM D 257-78)
- **Dielectric constant:** 2.4 - 3 at 102 - 108 Hz (ASTM D 150)

Item	Outside Ø mm	Length mm	Unit piece	Price EURO
331289	7	200	1	74.00
331290	8	200	1	84.00
331291	10	200	1	112.00
331292	12	200	1	136.00
331293	15	200	1	190.00
331294	18	200	1	212.00
331295	20	200	1	245.00
331296	22	200	1	264.00
331297	25	200	1	314.00
331298	30	200	1	410.00
331299	35	200	1	468.00
331300	40	200	1	574.00
331301	45	100	1	408.00
331302	50	100	1	464.00
331303	55	100	1	542.00
331304	60	50	1	482.00
331305	70	50	1	548.00
331306	75	50	1	584.00
331307	80	50	1	630.00
331308	90	50	1	754.00
331309	100	50	1	802.00
331310	7	400	1	118.00
331311	8	400	1	132.00
331312	10	400	1	178.00
331313	12	400	1	218.00
331314	15	400	1	302.00
331315	18	400	1	338.00
331316	20	400	1	392.00
331317	22	400	1	422.00
331318	25	400	1	498.00
331319	30	400	1	640.00
331320	35	400	1	746.00
331321	40	400	1	918.00
331322	45	200	1	648.00
331323	50	200	1	724.00
331324	55	200	1	844.00
331325	60	100	1	772.00
331326	70	100	1	892.00
331327	75	100	1	928.00
331328	80	100	1	1,006.00
331329	90	100	1	1,206.00
331330	100	100	1	1,282.00

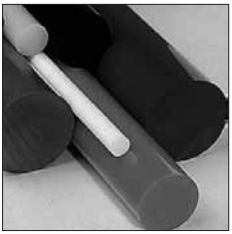
THOMAPLAST®-Solid Rod made of PEEK

Application area

- Engine parts, plain bearings, insulations, butterfly valves

Product specification

- Heavy-duty plastic
- Outstanding mechanical stability, stiffness and hardness
- High heat stability
- Good impact toughness
- Best wear resistance
- Very good chemical resistance, except for conc. sulfuric acid, conc. nitric acid and aqua regia (chloronitrous acid)
- Outstanding hydrolysis resistance
- Very high temperature resistance (outstandingly high operating temperature)
- Good creep resistance even at high temperatures
- Very high dimensional stability
- Inherent flame resistance
- Low formation of smoke
- Good electrical insulating properties as well as favorable dielectric characteristics
- Outstanding radiation resistance
- High-quality technical plastic (high-tech polymer), predominantly for mechanically and thermally highly loaded parts, also with antifrictional property for machine building, pump and fitting construction as well as for electrical engineering.
- For replacement of PTFE because of increased mechanical stability, outstanding wear resistance.
- For replacement of metals for pump bottom parts, valve seats, sliding elements, gearwheels, carrying wheels, high-temperature insulating parts in electrical engineering, parts in touch with boiling water or hot steam.



Technical specification

- **Material:** PEEK (polyether-etherketone)
- **Colour:** yellow-brown
- **Density:** 1.32 g/cm^3 (ISO 1183)
- **Temperature range:** up to +250 °C, for a short time +310 °C
- **Melting point:** +340 °C (ISO 3146)
- **Thermal conductivity:** 0.25 W/k x m (DIN 52612)
- **Flammability rating:** UL 94 V-0 (thickness 1.5 mm)
- **Tensile strength:** 110 N/mm^2 (ISO 527-2)
- **Elongation at break:** 20 % (ISO 527-2)
- **Elastic modulus:** 4,400 N/mm^2 (ISO 527-2)
- **Rockwell hardness:** M 105 (ISO 2039-2)
- **Notch impact strength:** 3.5 KJ/m^2 (ISO 179/1eA)
- **Dielectric loss factor:** at 1 MHz: 0.002 (IEC 60250), at 100 Hz: 0.001 (IEC 60250)
- **Dielectric strength:** 24 kV/mm (IEC 60243-1)
- **Volume resistivity:** 10^{12} Ohm x m (IEC 60093)
- **Surface resistivity:** 10^{13} Ohm (IEC 60093)
- **Regulations:** according to BfR and FDA

Item	Outside Ø mm	Tolerance mm	Length mm	Unit piece	Price EURO
300405	6	+0.1 / +0.4	500	1	53.00
300406	8	+0.1 / +0.5	500	1	61.00
300407	10	+0.1 / +0.5	500	1	76.00
300408	16	+0.2 / +0.9	500	1	145.00
300409	18	+0.2 / +0.9	500	1	167.00
300410	20	+0.2 / +0.9	500	1	199.00
300411	25	+0.2 / +1.2	500	1	247.00
300412	30	+0.2 / +1.2	500	1	296.00
300413	40	+0.2 / +1.6	500	1	423.00
300414	50	+0.3 / +2.0	500	1	576.00
300415	60	+0.3 / +2.5	500	1	771.00
300416	80	+0.4 / +3.0	500	1	1,347.00
300417	90	+0.5 / +3.4	500	1	1,706.00
300418	100	+0.6 / +3.8	500	1	2,098.00

THOMAPLAST®-Solid Rod made of PI

Application area

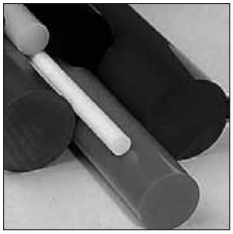
- For replacement of metals and ceramics, manufacturing of valve seats („high-tech valves“), slide bearings, as well as for pump bottom parts, rollers, high-temperature insulations and for electrotechnical parts.
- Nuclear, automobile and electrical industry, semi-conductor industry, defense technology, glass industry, injection moulding and extrusion plants, chemical industry („no steam“) and welding plants.

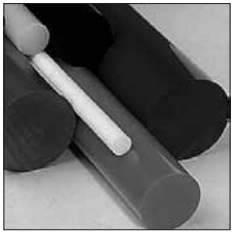
Product specification

- Heavy-duty plastic
- Outstandingly high temperature resistance (operating temperature limit)
- Very high stiffness and hardness
- Remarkable mechanical stability maintained over a large temperature range
- Good chemical resistance, good antifrictional properties
- Outstanding creep strength
- Very good dimensional stability and wear resistance
- Good electrical insulating properties
- Favorable dielectric characteristics
- Inherent flame resistance
- Outstanding radiation resistance
- Extremely high-quality technical plastic (duroplast) for special applications in machine and chemical apparatus building as well as in electrical engineering

Technical specification

- **Material:** PI (polyimide)
- **Colour:** natural (chestnut)
- **Temperature range:** -250 to +260 °C, for a short time +400 °C
- **Thermal conductivity:** 0.35 W/K x m (DIN 52612)
- **Burning characteristics:** 53 % („oxygen index“) (ASTM D2863)
- **Flammability rating:** UL 94 V-0 (thickness 1.5 mm)
- **Density:** 1.43 g/cm^3 (ASTM D 792)
- **Tensile strength:** 86 N/mm^2 (ASTM D 638M)
- **Elongation at break:** 7.5 % (ASTM D 638M)
- **Rockwell hardness:** M 92-102
- **Elastic modulus:** 3,100 N/mm^2 (ASTM D 790)
- **Izod impact toughness:** 750 J/m (ASTM D 256)
- **Dielectric strength:** 22 kV/mm (ASTM D 149)
- **Volume resistivity:** 10^{16} Ohm x cm (ASTM D 257)
- **Surface resistivity:** 10^{15} Ohm/cm2 (ASTM D 257)





Item	Outside Ø mm	Tolerance mm	Length mm	Unit piece	Price EURO
300460	6.4	-0 / +0.25	237.5	1	367.00
300461	9.5	-0 / +0.25	237.5	1	456.00
300462	11.1	-0 / +0.25	237.5	1	487.00
300463	12.7	-0 / +0.25	237.5	1	540.00
300464	15.9	-0 / +0.25	237.5	1	573.00
300465	19	-0 / +0.25	237.5	1	622.00
300466	25.4	-0 / +0.25	116	1	643.00
300467	31.8	-0 / +0.25	116	1	663.00
300468	38.1	-0 / +0.25	116	1	848.00
300469	50.8	-0 / +0.25	116	1	1,469.00
300470	63.5	-0 / +0.25	116	1	1,988.00
300471	82.5	-0 / +0.25	110	1	3,408.00

THOMAPLAST®-Solid Rod made of PMMA

Product specification
- Very good optical features
- UV-resistance
- Good resistance to acids and alkalis
- Highest stiffness and hardness
- High notch impact sensitivity
- Not suitable for slid functions
- Ideal plastic for transparent structures in machine building, in electrical engineering and model construction

Technical specification
- **Material:** PMMA (polymethylmethacrylate)
- **Version:** casted
- **Colour:** glass-clear
- **Temperature range:** -40 to +80 °C, for a short time+90 °C
- **Density:** 1.19 g/cm³ (DIN 53479)
- **Tearing strength:** 72 MPa (DIN 53455)
- **Elongation at break:** 5 % (DIN 53455)
- **Impact strength:** 15 kJ/m² (DIN 53453)
- **Notch impact strength:** 1.5 kJ/m² (DIN 53453)
- **Bending strength:** 125 MPa (DIN 53452)
- **Thermal conductivity:** 0.19 W/K x m at +20 °C (DIN 52612)
- **Dielectric constant:** 2.9 (DIN 53483)
- **Volume resistivity:** 10^{15} Ohm x cm (DIN 53482)
- **Dielectric strength:** 30 kV/mm (DIN 53481)

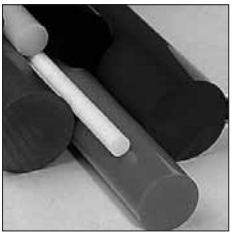
Item	Outside Ø mm	Tolerance mm	Length mm	Unit piece	Price EURO
301840	2	±0.3	250	1	39.00
301841	2	±0.3	500	1	62.00
301842	2	±0.3	1,000	1	85.00
301843	4	±0.3	250	1	44.00
301844	4	±0.3	500	1	70.00
301845	4	±0.3	1,000	1	93.00
301846	5	±0.3	250	1	47.00
301847	5	±0.3	500	1	77.00
301848	5	±0.3	1,000	1	103.00
301849	6	±0.3	250	1	49.00
301850	6	±0.3	500	1	80.00
301851	6	±0.3	1,000	1	105.00
301852	8	±0.3	250	1	52.00
301853	8	±0.3	500	1	85.00
301854	8	±0.3	1,000	1	113.00
301855	10	±0.3	250	1	54.00
301856	10	±0.3	500	1	87.00
301857	10	±0.3	1,000	1	118.00
301858	12	±0.3	250	1	62.00
301859	12	±0.3	500	1	100.00
301860	12	±0.3	1,000	1	139.00
301861	15	±0.3	250	1	72.00
301862	15	±0.3	500	1	118.00
301863	15	±0.3	1,000	1	156.00
301864	20	±0.3	250	1	98.00
301865	20	±0.3	500	1	156.00
301866	20	±0.3	1,000	1	185.00
301867	25	±0.3	250	1	113.00
301868	25	±0.3	500	1	164.00
301869	25	±0.3	1,000	1	210.00
301870	30	±0.3	250	1	126.00
301871	30	±0.3	500	1	177.00
301872	30	±0.3	1,000	1	238.00
301873	40	±0.3	250	1	141.00
301874	40	±0.3	500	1	213.00
301875	40	±0.3	1,000	1	297.00

THOMAPLAST®-Solid Rod made of POM - black

Application area
- For precision parts in machine and apparatus engineering

Product specification
- Good mechanical stability
- High mechanical hardness and stiffness
- Extruded and tempered
- Good impact resistance

Technical specification
- **Material:** POM-C (polyacetal-copolymer)
- **Colour:** black
- **Density:** 1.41 g/cm³
- **Temperature range:** -50 to +115 °C; for a short time +140 °C



Item	Outside Ø mm	Tolerance mm	Length mm	Unit piece	Price EURO
302178	6	+0.1 / +0.4	250	2	14.00
302179	6	+0.1 / +0.4	500	2	24.00
302180	6	+0.1 / +0.4	1,000	2	40.00
302181	8	+0.1 / +0.5	250	2	24.00
302182	8	+0.1 / +0.5	500	2	33.00
302183	8	+0.1 / +0.5	1,000	2	54.00
302184	10	+0.1 / +0.5	250	1	18.00
302185	10	+0.1 / +0.5	500	1	30.00
302186	10	+0.1 / +0.5	1,000	1	40.00
302187	12	+0.2 / +0.7	250	1	22.00
302188	12	+0.2 / +0.7	500	1	37.00
302189	12	+0.2 / +0.7	1,000	1	59.00
302190	16	+0.2 / +0.7	250	1	32.00
302191	16	+0.2 / +0.7	500	1	52.00
302192	16	+0.2 / +0.7	1,000	1	77.00
302193	18	+0.2 / +0.7	250	1	41.00
302194	18	+0.2 / +0.7	500	1	65.00
302195	18	+0.2 / +0.7	1,000	1	98.00
302196	20	+0.2 / +0.7	250	1	46.00
302197	20	+0.2 / +0.7	500	1	75.00
302198	20	+0.2 / +0.7	1,000	1	110.00
302199	25	+0.2 / +0.9	250	1	57.00
302200	25	+0.2 / +0.9	500	1	86.00
302201	25	+0.2 / +0.9	1,000	1	115.00
302202	28	+0.2 / +0.9	250	1	72.00

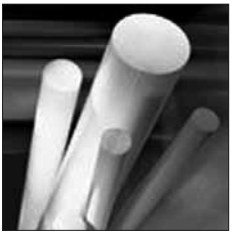
Item	Outside Ø mm	Tolerance mm	Length mm	Unit piece	Price EURO
302203	28	+0.2 / +0.9	500	1	108.00
302204	28	+0.2 / +0.9	1,000	1	144.00
302205	30	+0.2 / +0.9	250	1	83.00
302206	30	+0.2 / +0.9	500	1	124.00
302207	30	+0.2 / +0.9	1,000	1	165.00
302208	32	+0.2 / +1.1	250	1	89.00
302209	32	+0.2 / +1.1	500	1	127.00
302210	32	+0.2 / +1.1	1,000	1	155.00

THOMAPLAST®-Solid Rod made of POM - FDA

Application area
- Heavily loaded sliding elements, pump elements and rollers, chemical pump parts, filter housings, apparatus construction

Product specification
- Good temperature resistance
- Good chemical resistance
- Resistant to hydrolysis
- Very good dielectrical properties
- Not usable for slid functions
- Not suitable for use at low temperatures (embrittling at low temperatures)
- Not resistant to weather
- For drinking water according to KTW

Technical specification
- **Material:** PP (polypropylene)
- **Design:** extruded
- **Colour:** pebble grey (RAL 7032)
- **Density:** 0.91 g/m^3 (ISO 1183)
- **Temperature range:** 0 to +100 °C, for a short time +110 °C
- **Thermal conductivity:** 0.22 W/K x m (DIN 52612)
- **Flammability rating:** UL 94 HB
- **Melting point:** +165 °C (ISO 3146)
- **Tensile strength:** 30 N/mm^2 (ISO 527-2)
- **Elongation at break:** >50 % (ISO 527-2)
- **Elastic modulus:** 1,300 N/mm^2 (ISO 527-2)
- **Notch impact strength:** 9 KJ/m^2 (ISO 179/1eA)
- **Volume resistivity:** >10^{12} Ohm x m (IEC 60093)
- **Surface resistivity:** 10^{13} Ohm (IEC 60093)
- **Regulations:** BfR, FDA 21 CFR 177.1520



Item	Outside Ø mm	Tolerance mm	Length mm	Unit piece	Price EURO
300479	5	+0.1 / +0.4	500	1	14.00
300480	8	+0.1 / +0.5	500	1	15.00
300481	10	+0.1 / +0.5	500	1	17.00
300482	16	+0.2 / +0.7	500	1	34.00
300483	20	+0.2 / +0.7	500	1	48.00

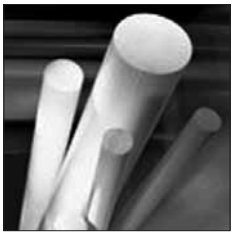
Item	Outside Ø mm	Tolerance mm	Length mm	Unit piece	Price EURO
300484	25	+0.2 / +0.9	500	1	69.00
300485	30	+0.2 / +0.9	500	1	76.00
300486	36	+0.2 / +1.1	500	1	98.00
300487	40	+0.2 / +1.1	500	1	115.00
300488	45	+0.3 / +1.3	500	1	135.00
300489	50	+0.3 / +1.3	500	1	156.00
300490	60	+0.3 / +1.6	500	1	189.00
300491	70	+0.3 / +1.6	500	1	213.00
300492	80	+0.4 / +2.0	500	1	256.00
300493	90	+0.5 / +2.2	500	1	289.00
300494	100	+0.6 / +2.5	500	1	313.00

THOMAPLAST®-Solid Rod made of PP - pebble grey

Application area
- Heavily loaded sliding elements, pump elements and rollers, chemical pump parts, filter housings, apparatus construction

Product specification
- Good temperature resistance
- Good chemical resistance
- Resistant to hydrolysis
- Very good dielectrical properties
- Not usable for slid functions
- Not suitable for use at low temperatures (embrittling at low temperatures)
- Not resistant to weather
- For drinking water according to KTW

Technical specification
- **Material:** PP (polypropylene)
- **Design:** extruded
- **Colour:** pebble grey (RAL 7032)
- **Density:** 0.91 g/m^3 (ISO 1183)
- **Temperature range:** 0 to +100 °C, for a short time +110 °C
- **Thermal conductivity:** 0.22 W/K x m (DIN 52612)
- **Flammability rating:** UL 94 HB
- **Melting point:** +165 °C (ISO 3146)
- **Tensile strength:** 30 N/mm^2 (ISO 527-2)
- **Elongation at break:** >50 % (ISO 527-2)
- **Elastic modulus:** 1,300 N/mm^2 (ISO 527-2)
- **Notch impact strength:** 9 KJ/m^2 (ISO 179/1eA)
- **Volume resistivity:** >10^{12} Ohm x m (IEC 60093)
- **Surface resistivity:** 10^{13} Ohm (IEC 60093)
- **Regulations:** BfR, FDA 21 CFR 177.1520



Item	Outside Ø mm	Tolerance mm	Length mm	Unit piece	Price EURO
302065	10	+0.6 / +0.1	250	2	18.00
302066	10	+0.6 / +0.1	500	2	30.00

Item	Outside Ø mm	Tolerance mm	Length mm	Unit piece	Price EURO
302067	10	+0.6 / +0.1	1,000	2	47.00
302068	15	+0.8 / +0.2	250	2	33.00
302069	15	+0.8 / +0.2	500	2	58.00
302070	15	+0.8 / +0.2	1,000	1	48.00
302071	20	+1.0 / +0.2	250	1	29.00
302072	20	+1.0 / +0.2	500	1	51.00
302073	20	+1.0 / +0.2	1,000	1	83.00
302074	25	+1.1 / +0.2	250	1	35.00
302075	25	+1.1 / +0.2	500	1	61.00
302076	25	+1.1 / +0.2	1,000	1	89.00
302077	30	+1.2 / +0.2	250	1	50.00
302078	30	+1.2 / +0.2	500	1	82.00
302079	30	+1.2 / +0.2	1,000	1	121.00
302080	40	+1.5 / +0.2	250	1	63.00
302081	40	+1.5 / +0.2	500	1	100.00
302082	40	+1.5 / +0.2	1,000	1	172.00
302083	50	+2.0 / +0.3	250	1	69.00
302084	50	+2.0 / +0.3	500	1	115.00
302085	50	+2.0 / +0.3	1,000	1	189.00
302086	60	+2.3 / +0.3	250	1	75.00
302087	60	+2.3 / +0.3	500	1	120.00
302088	70	+2.5 / +0.3	250	1	82.00
302089	70	+2.5 / +0.3	500	1	134.00

THOMAPLAST®-Virgin PTFE Semi-Finished Products

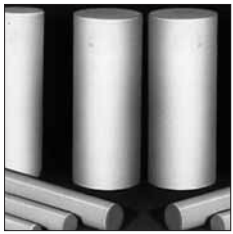
General product specification

- Heavy-duty plastic
- Very good chemical resistance to any organic and inorganic media
- No water absorption
- Very good temperature resistance
- Outstanding coefficient of sliding friction
- Excellent resistance to weather
- Antiadhesive surface
- Very low friction values
- Very good dielectric properties independent of frequency and temperature
- Very good electrical insulating capacity also at air humidity
- Non-combustible
- High tracking resistance
- Highest gas-tightness
- Resistant to stress cracks
- High-quality technical plastic for chemical apparatus construction, process engineering, machine construction, and electrical engineering
- Use in machine building and precision mechanical engineering: packings, piston rings, slide bearings, thread sealing tapes
- Use in chemical industry: packings, pumps, valves, filter bodies, heat exchanger, laboratory devices
- Use in electrical engineering: insulators in heavy current engineering and HF technology, line switches, tube sockets

General technical specification

- **Material:** PTFE (polytetrafluoroethylene)
- **Colour:** white
- **Shore hardness D:** 55° - 59° (DIN 53505)
- **Special features:** non-combustible, very good resistance to weather
- **Temperature range:** -200 to +260 °C, for a short time +280 °C
- **Melting point:** +320 °C
- **Density:** 2.15 - 2.18 g/cm³ (DIN 53479)
- **Tensile strength:** 20 - 40 N/mm² (DIN 53455)
- **Elongation at break:** 250 - 500 % (ASTM D638)
- **Notch impact strength:** 16 kJ/m²
- **Pressure resistance:** 3.9 - 4.4 N/mm² (1 % deformation at +23 °C)
- **Thermal conductivity:** 0.26 W/K x m (ASTM C 117)
- **Dielectric constant:** 2.1 at 50 Hz (DIN 53483)
- **Tolerance:** DIN ISO 3302-1 E2

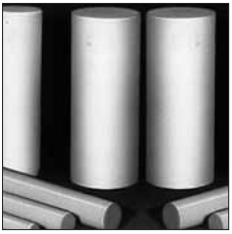
THOMAPLAST®-Solid Rod made of PTFE (virgin) - extruded



Item	Outside Ø mm	Tolerance mm	Length mm	Unit piece	Price EURO
300329	6	-0 / +0.4	250	2	14.00
300330	8	-0 / +0.4	250	1	15.00
300331	10	-0 / +0.4	250	1	18.00
300332	12	-0 / +0.8	250	1	24.00
300333	15	-0 / +0.8	250	1	33.00
300334	16	-0 / +0.8	250	1	37.00
300335	20	-0 / +0.8	250	1	44.00
300336	25	-0 / +1.2	250	1	63.00
300337	30	-0 / +1.2	250	1	84.00
300338	40	-0 / +1.6	250	1	102.00
300339	50	-0 / +2.0	250	1	117.00
300340	60	-0 / +2.4	250	1	135.00
300341	70	-0 / +3.2	250	1	177.00
300342	80	-0 / +3.2	250	1	209.00
300343	90	-0 / +4.0	250	1	265.00
300344	100	-0 / +4.0	250	1	306.00
300345	120	-0 / +5.0	250	1	370.00
300346	6	-0 / +0.4	500	1	14.00
300347	8	-0 / +0.4	500	1	24.00
300348	10	-0 / +0.4	500	1	37.00
300349	12	-0 / +0.8	500	1	41.00
300350	15	-0 / +0.8	500	1	66.00
300351	16	-0 / +0.8	500	1	70.00
300352	20	-0 / +0.8	500	1	85.00
300353	25	-0 / +1.2	500	1	117.00
300354	30	-0 / +1.2	500	1	168.00
300355	40	-0 / +1.6	500	1	202.00
300356	50	-0 / +2.0	500	1	234.00
300357	60	-0 / +2.4	500	1	269.00
300358	70	-0 / +3.2	500	1	316.00
300359	80	-0 / +3.2	500	1	375.00
300360	90	-0 / +4.0	500	1	478.00
300361	100	-0 / +4.0	500	1	511.00
300362	120	-0 / +5.0	500	1	690.00
300363	6	-0 / +0.4	1,000	1	24.00
300364	8	-0 / +0.4	1,000	1	44.00

Item	Outside Ø mm	Tolerance mm	Length mm	Unit piece	Price EURO
300365	10	-0 / +0.4	1,000	1	68.00
300366	12	-0 / +0.8	1,000	1	74.00
300367	15	-0 / +0.8	1,000	1	111.00
300368	16	-0 / +0.8	1,000	1	125.00
300369	20	-0 / +0.8	1,000	1	147.00
300370	25	-0 / +1.2	1,000	1	196.00
300371	30	-0 / +1.2	1,000	1	281.00
300372	40	-0 / +1.6	1,000	1	352.00
300373	50	-0 / +2.0	1,000	1	390.00
300374	60	-0 / +2.4	1,000	1	455.00
300375	70	-0 / +3.2	1,000	1	630.00
300376	80	-0 / +3.2	1,000	1	754.00
300377	90	-0 / +4.0	1,000	1	846.00
300378	100	-0 / +4.0	1,000	1	1,022.00
300379	120	-0 / +5.0	1,000	1	1,288.00

THOMAPLAST®-Solid Rod made of PTFE (virgin) - pressed



Item	Outside Ø mm	Tolerance mm	Length mm	Unit piece	Price EURO
300380	130	-0 / +4.0	150	1	344.00
300381	140	-0 / +4.0	150	1	398.00
300382	150	-0 / +4.0	150	1	451.00
300383	160	-0 / +4.0	150	1	473.00
300384	170	-0 / +4.0	150	1	519.00
300385	180	-0 / +4.0	150	1	587.00
300386	190	-0 / +4.0	150	1	651.00
300387	200	-0 / +4.0	150	1	723.00
300388	210	-0 / +4.0	150	1	800.00
300389	130	-0 / +4.0	300	1	603.00
300390	140	-0 / +4.0	300	1	696.00
300391	150	-0 / +4.0	300	1	790.00
300392	160	-0 / +4.0	300	1	815.00
300393	170	-0 / +4.0	300	1	919.00
300394	180	-0 / +4.0	300	1	1,011.00
300395	190	-0 / +4.0	300	1	1,119.00
300396	200	-0 / +4.0	300	1	1,245.00
300397	210	-0 / +4.0	300	1	1,378.00

Vulkollan®-Solid Rod - Shore 70°

Product specification

- High-performance polyurethane elastomer
- Constant elastomer quality due to closely specified quality control
- Excellent mechanical wear resistance
- Very good resistance to abrasion
- Remarkable elasticity over the complete hardness range
- Good tear propagation resistance
- High self-damping
- Low compression set
- Only relatively suitable for slipping functions
- Free of plasticizers
- Very good resistance to ozone, UV, and high-energy radiation
- Good resistance to weather and aging
- Good resistance to many oils, fats, petrols, and different solvents

Technical specification

- **Material:** PUR (Vulkollan® D 15); PUR (polyester polyol and naphthylene-1,5-diisocyanate (Desmodur 15)) as well as with additional, special chain elongators
- **Colour:** natural
- **Shore hardness A:** 70° ±5° (DIN 53505)
- **Temperature range:** -25 to +80 °C
- **Density:** 1.24 g/cm^3 (DIN 53479)
- **Tearing strength:** 40 MPa (DIN 53504)
- **Elongation at break:** 620 % (DIN 53504)
- **Tension:**
  at 100 % elongation: 3 MPa
  at 300 % elongation: 7 MPa
- **Tear propagation resistance**: 25 N/mm (DIN 53507)
- **Abrasion:** 50 mm^2 (DIN 53516)
- **Compression set:**
  at +72 °C / 24 h: 18 %
  at +23 °C / 72 h: 10 %
- **Rebound elasticity:** 45 %

Item	Outside Ø mm	Tolerance mm	Length mm	Unit piece	Price EURO
301269	6	±0.25	250	1	49.00
301270	6	±0.25	500	1	90.00
301271	8	±0.30	250	1	57.00
301272	8	±0.30	500	1	103.00
301273	10	±0.30	250	1	62.00
301274	10	±0.30	500	1	110.00
301275	12	±0.40	250	1	64.00
301276	12	±0.40	500	1	116.00
301277	14	±0.40	250	1	70.00
301278	14	±0.40	500	1	123.00
301279	16	±0.40	250	1	75.00
301280	16	±0.40	500	1	131.00
301281	18	±0.50	250	1	80.00

Item	Outside Ø mm	Tolerance mm	Length mm	Unit piece	Price EURO
301282	18	±0.50	500	1	139.00
301283	20	±0.50	250	1	87.00
301284	20	±0.50	500	1	151.00
301285	25	±0.50	250	1	90.00
301286	25	±0.50	500	1	156.00
301287	30	±0.60	250	1	95.00
301288	30	±0.60	500	1	169.00
301289	35	±0.60	250	1	113.00
301290	35	±0.60	500	1	195.00
301291	40	±0.60	250	1	136.00
301292	40	±0.60	500	1	228.00
301293	45	±0.80	250	1	146.00
301294	45	±0.80	500	1	243.00
301295	50	±0.80	250	1	151.00
301296	50	±0.80	500	1	233.00
301297	55	±0.80	250	1	177.00
301298	55	±0.80	500	1	271.00
301299	60	±0.80	250	1	192.00
301300	60	±0.80	500	1	300.00
301301	65	±1.00	250	1	210.00
301302	65	±1.00	500	1	315.00
301303	70	±1.00	250	1	228.00
301304	70	±1.00	500	1	333.00
301305	75	±1.00	250	1	254.00
301306	75	±1.00	500	1	371.00
301307	80	±1.00	250	1	259.00
301308	80	±1.00	500	1	374.00
301309	90	±1.00	250	1	277.00
301310	90	±1.00	500	1	381.00
301311	100	±1.00	250	1	341.00
301312	100	±1.00	500	1	473.00

Vulkollan®-Solid Rod - Shore 82°

Product specification

- High-performance polyurethane elastomer
- Constant elastomer quality due to closely specified quality control
- Excellent mechanical wear resistance
- Very good resistance to abrasion
- Remarkable elasticity over the complete hardness range
- Good tear propagation resistance
- High self-damping, low compression set
- Only relatively suitable for slipping functions
- Free of plasticizers
- Very good resistance to ozone, UV, and high-energy radiation
- Good resistance to weather and aging
- Good resistance to many oils, fats, petrols, and different solvents

Technical specification

- **Material:** PUR (Vulkollan® D 15); PUR (polyester polyol and naphthylene-1,5-diisocyanate (Desmodur 15) as well as with additional, special chain elongators
- **Colour:** natural
- **Shore hardness A:** 82° ±5° (DIN 53505)
- **Density:** 1.25 g/cm³ (DIN 53479)
- **Temperature range:** -15 to +80 °C
- **Tearing strength:** 46 MPa (DIN 53504)
- **Elongation at break:** 650 % (DIN 53504)
- **Tear propagation resistance:** 40 N/mm (DIN 53507)
- **Abrasion:** 32 mm³ (DIN 53516)
- **Compression set:** 18 % at +70 °C / 24 h

Item	Outside Ø mm	Tolerance mm	Length mm	Unit piece	Price EURO
301313	6	±0.25	250	1	49.00
301314	6	±0.25	500	1	90.00
301315	8	±0.30	250	1	57.00
301316	8	±0.30	500	1	103.00
301317	10	±0.30	250	1	62.00
301318	10	±0.30	500	1	110.00
301319	12	±0.40	250	1	64.00
301320	12	±0.40	500	1	116.00
301321	14	±0.40	250	1	70.00
301322	14	±0.40	500	1	123.00
301323	16	±0.40	250	1	75.00
301324	16	±0.40	500	1	131.00
301325	18	±0.50	250	1	80.00
301326	18	±0.50	500	1	139.00
301327	20	±0.50	250	1	87.00
301328	20	±0.50	500	1	151.00
301329	25	±0.50	250	1	90.00
301330	25	±0.50	500	1	156.00
301331	30	±0.60	250	1	95.00
301332	30	±0.60	500	1	169.00
301333	35	±0.60	250	1	113.00
301334	35	±0.60	500	1	195.00
301335	40	±0.60	250	1	136.00
301336	40	±0.60	500	1	228.00
301337	45	±0.80	250	1	146.00
301338	45	±0.80	500	1	243.00
301339	50	±0.80	250	1	151.00
301340	50	±0.80	500	1	233.00
301341	55	±0.80	250	1	177.00
301342	55	±0.80	500	1	271.00
301343	60	±0.80	250	1	192.00
301344	60	±0.80	500	1	300.00
301345	65	±1.00	250	1	210.00
301346	65	±1.00	500	1	315.00
301347	70	±1.00	250	1	228.00
301348	70	±1.00	500	1	333.00
301349	75	±1.00	250	1	254.00
301350	75	±1.00	500	1	371.00
301351	80	±1.00	250	1	259.00
301352	80	±1.00	500	1	374.00
301353	90	±1.00	250	1	277.00
301354	90	±1.00	500	1	381.00
301355	100	±1.00	250	1	341.00
301356	100	±1.00	500	1	473.00

Vulkollan®-Solid Rod - Shore 90°

Product specification

- High-performance polyurethane elastomer
- Constant elastomer quality due to closely specified quality control
- Excellent mechanical wear resistance
- Very good resistance to abrasion
- Remarkable elasticity over the complete hardness range
- Good tear propagation resistance
- High self-damping
- Low compression set
- Only relatively suitable for slipping functions
- Free of plasticizers
- Very good resistance to ozone, UV, and high-energy radiation
- Good resistance to weather and aging
- Good resistance to many oils, fats, petrols, and different solvents

Technical specification

- **Material:** PUR (Vulkollan® D 15); PUR (polyester polyol and naphthylene-1,5-diisocyanate (Desmodur 15) as well as with additional, special chain elongators
- **Colour:** natural
- **Shore hardness A:** 90° ±5° (DIN 53505)
- **Density:** 1.26 g/cm^3 (DIN 53479)
- **Temperature range:** -25 to +80 °C
- **Tearing strength:** 40 MPa (DIN 53504)
- **Elongation at break:** 660 % (DIN 53504)
- **Tension:**
  at 100 % elongation: 8 MPa
  at 300 % elongation: 16 MPa
- **Tear propagation resistance:** 55 N/mm (DIN 53507)
- **Abrasion:** 32 mm^2 (DIN 53516)
- **Compression set:**
  at +70 °C / 24 h: 20 %
  at +23 °C / 72 h: 12 %
- **Rebound elasticity:** 55 %

Item	Outside Ø mm	Tolerance mm	Length mm	Unit piece	Price EURO
301357	6	±0.25	250	1	57.00
301358	6	±0.25	500	1	100.00
301359	8	±0.30	250	1	59.00
301360	8	±0.30	500	1	108.00
301361	10	±0.30	250	1	64.00
301362	10	±0.30	500	1	116.00
301363	12	±0.40	250	1	67.00
301364	12	±0.40	500	1	121.00
301365	14	±0.40	250	1	75.00
301366	14	±0.40	500	1	131.00
301367	16	±0.40	250	1	80.00
301368	16	±0.40	500	1	139.00
301369	18	±0.50	250	1	85.00
301370	18	±0.50	500	1	146.00
301371	20	±0.50	250	1	93.00
301372	20	±0.50	500	1	159.00
301373	25	±0.50	250	1	95.00
301374	25	±0.50	500	1	167.00
301375	30	±0.60	250	1	110.00
301376	30	±0.60	500	1	190.00
301377	35	±0.60	250	1	131.00
301378	35	±0.60	500	1	223.00
301379	40	±0.60	250	1	151.00
301380	40	±0.60	500	1	254.00
301381	45	±0.80	250	1	164.00
301382	45	±0.80	500	1	277.00
301383	50	±0.80	250	1	172.00
301384	50	±0.80	500	1	264.00
301385	55	±0.80	250	1	195.00
301386	55	±0.80	500	1	310.00
301387	60	±0.80	250	1	213.00
301388	60	±0.80	500	1	338.00
301389	65	±1.00	250	1	233.00
301390	65	±1.00	500	1	356.00
301391	70	±1.00	250	1	259.00
301392	70	±1.00	500	1	379.00
301393	75	±1.00	250	1	261.00
301394	75	±1.00	500	1	384.00
301395	80	±1.00	250	1	274.00
301396	80	±1.00	500	1	392.00
301397	90	±1.00	250	1	294.00
301398	90	±1.00	500	1	407.00
301399	100	±1.00	250	1	353.00
301400	100	±1.00	500	1	509.00

THOMAPLAST®-Solid Rod made of PVC (rigid)

Application area

- Laboratory technology, chemical technology, mechanical engineering, electrical engineering

Product specification

- High mechanical stability
- UV-stabilized
- Good dielectrical properties
- Good chemical resistance
- Resistant to weather
- Hot formable
- Bondable and weldable

Technical specification
- **Material:** rigid PVC (rigid polyvinyl chloride)
- **Colour:** grey or red
- **Design:** extruded and calendered
- **Density:** 1.42 g/cm³
- **Temperature range:** 0 to +60 °C, for a short time +75 °C

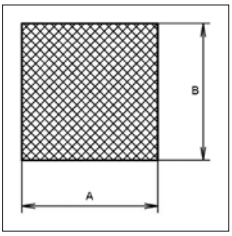
Item	Outside Ø mm	Tolerance mm	Length mm	Colour	Unit piece	Price EURO
301947	6	+0.4 / +0.1	500	grey	2	17.00
301948	6	+0.4 / +0.1	1,000	grey	2	27.00
301949	8	+0.5 / +0.1	500	grey	2	22.00
301950	8	+0.5 / +0.1	1,000	grey	2	37.00
301951	10	+0.6 / +0.1	500	grey	2	27.00
301952	10	+0.6 / +0.1	1,000	grey	2	47.00
301953	12	+0.7 / +0.1	500	grey	1	22.00
301954	12	+0.7 / +0.1	1,000	grey	1	34.00
301955	15	+0.8 / +0.2	250	grey	1	16.00
301956	15	+0.8 / +0.2	500	grey	1	27.00
301957	15	+0.8 / +0.2	1,000	grey	1	43.00
301958	18	+0.9 / +0.2	250	grey	1	22.00
301959	18	+0.9 / +0.2	500	grey	1	36.00
301960	18	+0.9 / +0.2	1,000	grey	1	61.00
301961	20	+1.0 / +0.2	250	grey	1	24.00
301962	20	+1.0 / +0.2	500	grey	1	40.00
301963	20	+1.0 / +0.2	1,000	grey	1	65.00
301964	25	+1.1 / +0.2	250	grey	1	30.00
301965	25	+1.1 / +0.2	500	grey	1	53.00
301966	25	+1.1 / +0.2	1,000	grey	1	81.00
301967	30	+1.2 / +0.2	250	grey	1	34.00
301968	30	+1.2 / +0.2	500	grey	1	59.00
301969	30	+1.2 / +0.2	1,000	grey	1	86.00
301970	35	+1.3 / +0.2	250	grey	1	40.00
301971	35	+1.3 / +0.2	500	grey	1	68.00
301972	35	+1.3 / +0.2	1,000	grey	1	94.00
301973	40	+1.5 / +0.2	250	grey	1	48.00
301974	40	+1.5 / +0.2	500	grey	1	77.00
301975	40	+1.5 / +0.2	1,000	grey	1	100.00
301976	45	+1.7 / +0.3	250	grey	1	53.00
301977	45	+1.7 / +0.3	500	grey	1	83.00
301978	45	+1.7 / +0.3	1,000	grey	1	98.00
301979	50	+2.0 / +0.3	250	grey	1	61.00
301980	50	+2.0 / +0.3	500	grey	1	97.00
301981	50	+2.0 / +0.3	1,000	grey	1	105.00
302230	15	+0.8 / +0.2	250	red	2	17.00
302231	15	+0.8 / +0.2	500	red	1	25.00
302232	15	+0.8 / +0.2	1,000	red	1	42.00
302233	18	+0.9 / +0.2	250	red	1	22.00
302234	18	+0.9 / +0.2	500	red	1	35.00
302235	18	+0.9 / +0.2	1,000	red	1	59.00
302236	20	+1.0 / +0.2	250	red	1	27.00
302237	20	+1.0 / +0.2	500	red	1	44.00
302238	20	+1.0 / +0.2	1,000	red	1	71.00
302239	25	+1.1 / +0.2	250	red	1	35.00
302240	25	+1.1 / +0.2	500	red	1	49.00
302241	25	+1.1 / +0.2	1,000	red	1	79.00
302242	30	+1.2 / +0.2	250	red	1	37.00
302243	30	+1.2 / +0.2	500	red	1	60.00
302244	30	+1.2 / +0.2	1,000	red	1	97.00
302245	40	+1.5 / +0.2	250	red	1	51.00
302246	40	+1.5 / +0.2	500	red	1	75.00
302247	40	+1.5 / +0.2	1,000	red	1	109.00
302248	50	+2.0 / +0.3	250	red	1	59.00
302249	50	+2.0 / +0.3	500	red	1	85.00
302250	50	+2.0 / +0.3	1,000	red	1	127.00
302251	60	+2.3 / +0.3	250	red	1	63.00
302252	60	+2.3 / +0.3	500	red	1	90.00
302253	60	+2.3 / +0.3	1,000	red	1	144.00

THOMAPLAST®-Square Rod made of PVC (rigid)

Application area
- Laboratory technology, electroplating technology, electrical engineering, ventilation technology

Product specification
- Good dielectrical properties
- Hot formable
- Bondable and weldable
- Hardly inflammable
- Good resistance to weather
- Good chemical resistance

Technical specification
- **Material:** PVC-U, polyvinyl chloride
- **Design:** extruded
- **Color:** dark gray
- **Density:** 1.42 g/cm³
- **Temperature range:** 0 to +60 °C, for a short time +75 °C



Item	A mm	B mm	Length mm	Unit piece	Price EURO
302020	10	10	500	2	22.00
302021	10	10	1,000	2	37.00
302022	15	15	500	1	22.00
302023	15	15	1,000	1	37.00
302024	21	21	250	1	21.00
302025	21	21	500	1	35.00
302026	21	21	1,000	1	59.00
302027	30	30	250	1	37.00
302028	30	30	500	1	64.00
302029	30	30	1,000	1	101.00

THOMAPLAST®-Solid Rod made of PVDF

Application area

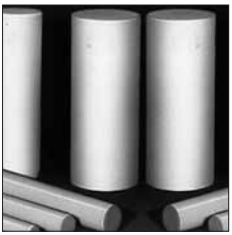
- Used in chemical apparatus and machine building, especially in the petrochemical, chemical, metallurgical, pharmaceutical, food processing, paper and textile industry as well as in the nuclear technology (pump carrying wheels, flanges, valve bodies etc.).

Product specification

- Heavy-duty plastic
- Very good chemical resistance, but limited compared to PTFE
- Outstanding hydrolysis resistance
- Good temperature resistance coupled with high operating temperature limit
- High impact toughness even at low temperatures
- Great hardness
- High mechanical stability, stiffness and creep strength (in this regard superior to other plastics)
- High heat-stability
- Thermoplasticly processable
- Good electrical insulating properties
- Very high dimensional stability
- Inherent flame-resistance
- Very good radiation resistance
- Outstanding UV and weather resistance
- Physiologically safe

Technical specification

- **Material:** PVDF (polyvinylidene fluoride)
- **Colour:** natural, translucent
- **Density:** 1.78 g/cm^3 (ISO 1183)
- **Temperature range:** -60 to +150 °C, for a short time +160 °C
- **Melting point:** +169 °C (ISO 3146)
- **Flammability rating:** UL 94 V-0 (at 1.5 or 3 mm thickness)
- **Thermal conductivity:** 0.19 W/K x m at +23 °C (DIN 52612)
- **Tensile strength:** 50 N/mm^2 (yield stress) (ISO 527-2)
- **Elongation at break:** >50 % (ISO 527-2)
- **Elastic modulus:** 2,000 N/mm^2 (ISO 527-2)
- **Notch impact strength:** 6 kJ/m^2 (ISO 179/1eA)
- **Rockwell hardness:** M 75 (ISO 2039-2)
- **Dielectric loss factor:** at 1 MHz: 0.165 (IEC 60250), at 100 Hz: 0.025 (IEC 60250)
- **Dielectric strength:** 20 kV/mm (IEC 60242-1)
- **Volume resistivity:** 10^{12} Ohm x m (IEC 60093)
- **Surface resistivity:** 10^{13} Ohm (IEC 60093)
- **Tolerance:** DIN ISO 3302-1 E2
- **Regulations:** according to BfR and FDA



Item	Outside Ø mm	Tolerance mm	Length mm	Unit piece	Price EURO
300420	10	+0.1 / +0.5	500	1	56.00
300421	16	+0.2 / +0.9	500	1	79.00
300422	20	+0.2 / +0.9	500	1	97.00
300423	25	+0.2 / +1.2	500	1	129.00
300424	30	+0.2 / +1.2	500	1	168.00
300425	35	+0.2 / +1.6	500	1	214.00
300426	40	+0.2 / +1.6	500	1	245.00
300427	45	+0.3 / +2.0	500	1	302.00
300428	50	+0.3 / +2.0	500	1	359.00
300429	60	+0.3 / +2.5	500	1	417.00
300430	70	+0.3 / +2.5	500	1	504.00
300431	80	+0.4 / +3.0	500	1	522.00
300432	90	+0.5 / +3.4	500	1	653.00
300433	100	+0.6 / +3.8	500	1	802.00

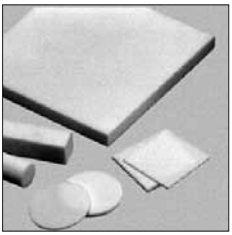
THOMAPLAST®-Solid Rod made of Glass Ceramic

Product specification

- Highest temperature ceramic
- Absolute chemical resistance
- No uptake of humidity
- Non-porous, not deformable
- Great hardness
- Outstanding insulating material at high voltages, a high frequency range at high temperatures
- Achievable manufacturing tolerances up to 0.013 mm
- Achievable surface roughness >0.5 µm to 0.013 µm (polished)
- Processing can be done with usual metal processing tools for metal (metal cutting), thus purchase of expensive diamond tools is not necessary

Technical specification

- **Material:** glass ceramic
- **Colour:** white
- **Temperature range:** -200 to +800 °C, for a short time +1,000 °C
- **Special features:** highest temperature loadability, great hardness, achievable manufacturing tolerances up to 0.013 mm
- **Expansion coefficient:** at -200 to +25 °C: 74 x 10^{-7} / °C, at +25 to +800 °C: 126 x 10^{-7} / °C
- **Specific heat (+25 °C):** 0.79 kJ/kg x K
- **Heat conduction (+25 °C):** 1.46 W/m °C
- **Heat diffusion (+25 °C):** 7.3 x 10^{-7} m^2/s
- **Density:** 2.52 g/cm^3
- **Porosity:** 0 %
- **Elastic modulus:** 66.9 GPa (Youngs modulus)
- **Shear modulus:** 25.5 GPa
- **Rockwell hardness:** M 48
- **Tensile strength:** 94 MPa (modulus of rupture)
- **Pressure resistance:** 345 MPa
- **Breaking strength:** 1.53 MPa M 0.5
- **Dielectric constant:** 6.03 at 1 kHz; 5.67 at 8.5 GHz
- **Dielectric strength (GS/WS):** 40 kV/mm at 0.01 thickness, +25 °C
- **GS-Volume resistivity:** >10^{16} Ohm/cm



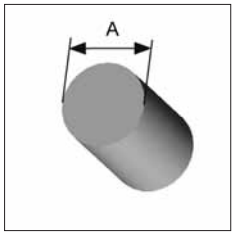
Item	Outside Ø mm	Length mm	Unit piece	Price EURO
300525	10	100	1	167.00
300526	15	100	1	210.00
300527	20	100	1	254.00
300528	25	100	1	300.00

THOMASTABIL®-Solid Rod made of Glass Fiber Reinforced Plastic GFRP

Application area:
- Laboratory technology, electroplating technology, electrical engineering

Product specification:
- Self-extinguishing and halogen-free
- Linear stress-strain behavior, low weight
- Electrically insulating, chemical-resistant
- Corrosion-resistant and weatherproof
- UV-resistant, thermally insulating
- High economic efficiency, high stability
- Metal-free, unmagnetic
- The unsaturated polyester resins are among the most commonly used resins in composite materials. UP resins are a colourless to slightly yellow solution of unsaturated polyester in a reactive solvent, usually styrene. At room temperature or by supply of heat, they are cured, whereby a heat reaction is released.

Technical specification:
- **Material:**
  Resin: polyester
  Reinforcing fibers: glass fibers
- **Design:** pultruded
- **Color:** dark gray / white
- **Density:** 2 g/cm^3
- **Temperature range:** -100 to +155 °C, for a short time +180 °C
- **Impact toughness (IZOD):** 300 kJ/m^2
- **Interlaminar shear strength:** 25 MPa
- **Volume resistivity:** 10^{10} - 10^{15} Ohm * cm
- **Surface resistance:** 10^{10} - 10^{15} Ohm
- **Breakdown strength:** 5 - 10 kV/mm
- **Comparative tracking index (CTI):** KA 3c / KB 500 / KC 600
- **Dielectric constant:** <5
- **Coefficient of linear thermal expansion:** 12 x 10^{-6} 1/K
- **Thermal conductivity:** 0.2 - 0.6 W/m*K
- **Specific heat capacity:** 1.0 - 1.2 kJ/kg*K
- **Water absorption:** 0.15 %
- **Dimensional stability by Martens method:** +200 °C
- **Resistance to glow heat:** level 2b
- **Elongation at break:** 1.0 - 1.8 %
- **Barcol hardness:** >40
- **Tolerances diameter:** 0 - 10 mm ±0.20 mm
  10 - 20 mm ±0.30 mm, 20 - 40 mm ±0.35 mm
- **Fire class:** B2, UL94 V-1, UL 94 V-0, DIN 5510 S4 SR2, ST2, ASTM E84 < 25, ASTM D635
  All following measured values are depending on the test direction: parallel (II) or perpendicular (+) to the fibers.
- **Tensile strength:** II: 250 MPa; +: 30-80 MPa
- **Tension stress:** II: 135 MPa (short-term); 70 MPa (long-term)
  +: 20 MPa (short-term); 15 MPa (long-term)
- **Bending strength:** II: 250 MPa; +: 30-80 MPa
- **Bending stress:** II: 135 MPa (short-term); 70 MPa (long-term)
  +: 20 MPa (short-term); 15 MPa (long-term)
- **Elastic modulus tensile strength:** II: 23,000 MPa; +: 8,000 MPa
- **Elastic modulus bending:** II: 25,000 MPa; +: 9,000 MPa
- **Compressive strength:** II: 450 MPa; +: 90 MPa
- **Compressive stress:** II: 135 MPa (short-term); 70 MPa (long-term)
  +: 25 MPa (short-term); 20 MPa (long-term)
- **Compressive modulus:** II: 1,000 MPa; +: 4,000 MPa



Item	A mm	Unit mm	Price EURO
306480	2	500	20.00
306481	2	1,000	36.00
306482	3	500	22.00
306483	3	1,000	40.00
306484	4	500	24.00
306485	4	1,000	46.00
306486	5	500	28.00
306487	5	1,000	50.00
306488	6	500	34.00
306489	6	1,000	62.00
306490	8	500	38.00
306491	8	1,000	66.00
306492	9	500	46.00
306493	9	1,000	80.00
306494	10	500	48.00
306495	10	1,000	84.00
306496	12	500	60.00
306497	12	1,000	104.00
306498	16	500	74.00
306499	16	1,000	128.00
306500	18	500	90.00
306501	18	1,000	156.00
306502	20	500	96.00
306503	20	1,000	166.00

Metals

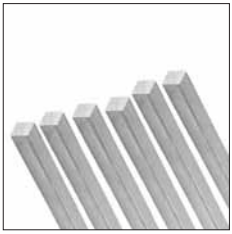
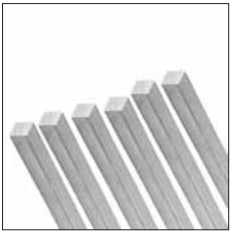
THOMASTABIL®-Solid Rod made of Aluminum

Product specification
- Material standard BS 1474 HE30TF (1972)
- Material: AlBS 1474

Item	Outside Ø mm	Length mm	Unit piece	Price EURO
300586	6.35	610	1	19.00
300587	12.7	610	1	25.00
300588	19.05	610	1	35.00
300589	25.4	610	1	48.00
300590	38.1	610	1	76.00

THOMASTABIL®-Square Rod made of Aluminum

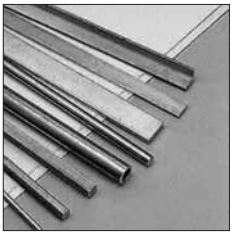
Product specification
- Material standard BS 1474 HETF (1972)
- Material: AlBS 1474

Item	Width mm	Height mm	Length mm	Unit piece	Price EURO
300591	19.05	3.2	610	1	27.00
300592	25.4	3.2	610	1	30.00
300593	50.8	3.2	610	1	39.00

THOMASTABIL®-Solid Rod made of Stainless Steel

Product specification
- Seamless type 316L according to ASTM 269
- Austenitic, corrosion-proof and antimagnetic steel
- Easy to process and to polish
- Improvement of mechanical properties by cold processing
- Typical use in chemical engineering, food processing, gas and oil industries, in hospital engineering and in vehicle construction, wherever corrosion resistance is required.

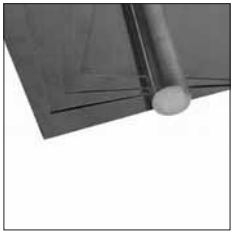


Item	Outside Ø mm	Length mm	Unit piece	Price EURO
300569	4	1,000	1	23.00
300570	6	1,000	1	28.00
300571	10	1,000	1	45.00
300572	12	1,000	1	48.00
300573	14	1,000	1	65.00
300574	18	1,000	1	87.00
300575	20	1,000	1	110.00
300576	25	1,000	1	133.00

THOMASTABIL®-Solid Rod made of Copper

Product specification
- Highly conductive
- Corrosion-proof
- Formable as solid rod, pipe or sheet
- Material standard BS 2870/C 101 (1980)

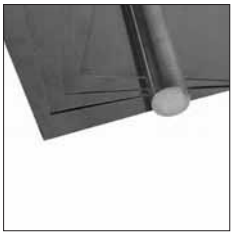
Technical specification
- **Analysis for copper:** 99.90 %, lead 0.005 %, bismuth 0.001 %
- **Tensile strength:** 240 N/mm^2 (for solid rods and sheets)



Item	Outside Ø mm	Length mm	Unit piece	Price EURO
300561	3	1,000	1	13.00
300562	6	1,000	1	25.00
300563	12	1,000	1	80.00
300564	15	1,000	1	114.00
300565	20	1,000	1	142.00
300566	25	1,000	1	191.00

THOMASTABIL®-Solid Rod made of Brass

Product specification
- Machine quality
- Turned material
- Processing to bolts, gearwheels etc.



Item	Outside Ø mm	Length mm	Unit piece	Price EURO
300544	3	500	1	28.00
300545	5	500	1	32.00
300546	6	500	1	33.00
300547	12	500	1	54.00
300548	15	500	1	71.00
300549	18	500	1	87.00
300550	21	500	1	116.00
300551	24	500	1	127.00
300552	6.35	610	1	34.00
300553	12.7	610	1	71.00
300554	19.05	610	1	97.00
300555	25.4	610	1	127.00

Pipes (4 - 112 mm)

THOMAPLAST®-Pipe made of PA - extruded

Product specification

- Good mechanical stability, good impact toughness
- Very good wear resistance
- Good coefficient of sliding friction, good temperature resistance
- Good electrical insulating properties

Technical specification

- **Material:** PA 6 (polyamide)
- **Colour:** natural and black (material addition: MoS2 molybdenum sulphide)
- **Shore hardness D:** 72° - 82° (DIN 53505)
- **Temperature range:** -40 to +85 °C, for a short time +160 °C
- **Melting point:** +220 °C (DIN 53736)
- **Density:** 1.14 g/cm^3 (DIN 53479)
- **Tensile strength:** 78 N/mm^2 (DIN 53455)
- **Elongation at break:** >50 % (DIN 53455)
- **Notch impact strength:** 4 kJ/m^2 (DIN 53453)
- **Elastic modulus:** 3,100 N/mm^2 (DIN 53457)
- **Thermal conductivity:** 0.28 W/K x m (DIN 52612)
- **Dielectric constant:** 3.9 at 50 Hz (DIN 53483)
- **Volume resistivity:** 10^{15} Ohm x cm (DIN 53482)

Item	Inside Ø mm	Outside Ø mm	Tolerance outside Ø mm	Length mm	Colour	Price EURO
301776	10	20	+1.1 / +0.4	250	nature	34.00
301777	10	20	+1.1 / +0.4	500	nature	54.00
301778	10	20	+1.1 / +0.4	1,000	nature	87.00
301779	10	20	+1.1 / +0.4	250	black	39.00
301780	10	20	+1.1 / +0.4	500	black	62.00
301781	10	20	+1.1 / +0.4	1,000	black	105.00
301782	15	25	+1.1 / +0.4	250	nature	47.00
301783	15	25	+1.1 / +0.4	500	nature	70.00
301784	15	25	+1.1 / +0.4	1,000	nature	108.00
301785	15	25	+1.1 / +0.4	250	black	54.00
301786	15	25	+1.1 / +0.4	500	black	80.00
301787	15	25	+1.1 / +0.4	1,000	black	121.00
301788	15	32	+2.0 / +0.6	250	nature	67.00
301789	15	32	+2.0 / +0.6	500	nature	95.00
301790	15	32	+2.0 / +0.6	1,000	nature	141.00
301791	15	32	+2.0 / +0.6	250	black	77.00
301792	15	32	+2.0 / +0.6	500	black	105.00
301793	15	32	+2.0 / +0.6	1,000	black	151.00
301794	17	36	+2.0 / +0.6	250	nature	80.00
301795	17	36	+2.0 / +0.6	500	nature	108.00
301796	17	36	+2.0 / +0.6	1,000	nature	151.00
301797	17	36	+2.0 / +0.6	250	black	93.00
301798	17	36	+2.0 / +0.6	500	black	126.00
301799	17	36	+2.0 / +0.6	1,000	black	164.00
301800	25	36	+2.0 / +0.6	250	nature	75.00
301801	25	36	+2.0 / +0.6	500	nature	105.00
301802	25	36	+2.0 / +0.6	1,000	nature	159.00
301803	25	40	+2.0 / +0.6	250	nature	100.00
301804	25	40	+2.0 / +0.6	500	nature	131.00
301805	25	40	+2.0 / +0.6	1,000	nature	190.00
301806	30	40	+2.0 / +0.6	250	black	82.00
301807	30	40	+2.0 / +0.6	500	black	118.00
301808	30	40	+2.0 / +0.6	1,000	black	177.00
301809	30	50	+2.0 / +0.6	250	nature	123.00
301810	30	50	+2.0 / +0.6	500	nature	162.00
301811	30	50	+2.0 / +0.6	1,000	nature	218.00
301812	30	51	+2.0 / +0.6	250	black	172.00
301813	30	51	+2.0 / +0.6	500	black	215.00
301814	30	51	+2.0 / +0.6	1,000	black	259.00
301815	30	60	+2.5 / +0.8	250	black	192.00
301816	30	60	+2.5 / +0.8	500	black	238.00
301817	30	60	+2.5 / +0.8	1,000	black	284.00
301818	35	55	+2.5 / +0.8	250	nature	100.00
301819	35	55	+2.5 / +0.8	500	nature	144.00
301820	35	55	+2.5 / +0.8	1,000	nature	202.00
301821	40	60	+2.5 / +0.8	250	nature	110.00
301822	40	60	+2.5 / +0.8	500	nature	159.00
301823	40	60	+2.5 / +0.8	1,000	nature	220.00

THOMAPLAST®-Pipe made of PTFE (virgin) - extruded

Product specification

- Heavy-duty plastic
- Very good chemical resistance to any organic and inorganic media
- No water absorption
- Very good temperature resistance
- Outstanding coefficient of sliding friction
- Excellent resistance to weather
- Antiadhesive surface
- Very low friction values
- Very good dielectric properties independent of frequency and temperature

- Very good electrical insulating capacity also at air humidity
- Non-combustible
- High tracking resistance
- Highest gas-tightness
- Resistant to stress cracks
- High-quality technical plastic for chemical apparatus construction, process engineering, machine construction, and electrical engineering
- Use in machine building and precision mechanical engineering: packings, piston rings, slide bearings, thread sealing tapes
- Use in chemical industry: packings, pumps, valves, filter bodies, heat exchanger, laboratory devices
- Use in electrical engineering: insulators in heavy current engineering and HF technology, line switches, tube sockets

Technical specification

- **Material:** PTFE (polytetrafluoroethylene)
- **Colour:** white
- **Shore hardness D:** 55° - 59° (DIN 53505)
- **Special features:** non-combustible, very good resistance to weather
- **Temperature range:** -200 to +260 °C, for a short time +280 °C
- **Melting point:** +320 °C
- **Density:** 2.15 - 2.18 g/cm^3 (DIN 53479)
- **Tensile strength:** 20 - 40 N/mm^2 (DIN 53455)
- **Elongation at break:** 250 - 500 % (ASTM D638)
- **Notch impact strength:** 16 kJ/m^2
- **Pressure resistance:** 3.9 - 4.4 N/mm^2 (1 % deformation at +23 °C)
- **Thermal conductivity:** 0.26 W/K x m (ASTM C 117)
- **Dielectric constant:** 2.1 at 50 Hz (DIN 53483)
- **Tolerance:** DIN ISO 3302-1 E2

Item	Inside Ø mm	Outside Ø mm	Length mm	Unit piece	Price EURO
300209	6	10	250	2	23.00
300210	6	12	250	1	19.00
300211	8	14	250	1	24.00
300212	10	15	250	1	20.00
300213	10	16	250	1	24.00
300214	10	18	250	1	32.00
300215	10	20	250	1	39.00
300216	15	20	250	1	25.00
300217	10	22	250	1	44.00
300218	15	22	250	1	32.00
300219	10	25	250	1	59.00
300220	15	25	250	1	53.00
300221	10	27	250	1	75.00
300222	15	27	250	1	64.00
300223	10	30	250	1	84.00
300224	15	30	250	1	81.00
300225	20	30	250	1	74.00
300226	20	33	250	1	85.00
300227	10	35	250	1	111.00
300228	20	35	250	1	100.00
300229	25	35	250	1	88.00
300230	20	40	250	1	121.00
300231	25	40	250	1	109.00
300232	30	40	250	1	96.00
300233	20	45	250	1	167.00
300234	25	45	250	1	145.00
300235	30	45	250	1	120.00
300236	25	50	250	1	189.00
300237	30	50	250	1	167.00
300238	40	50	250	1	106.00
300239	20	55	250	1	211.00
300240	30	55	250	1	173.00
300241	40	55	250	1	126.00
300242	20	60	250	1	230.00
300243	30	60	250	1	198.00
300244	40	60	250	1	153.00
300245	20	65	250	1	281.00
300246	30	65	250	1	244.00
300247	40	65	250	1	204.00
300248	50	65	250	1	156.00
300249	6	10	500	1	24.00
300250	6	12	500	1	35.00
300251	8	14	500	1	45.00
300252	10	15	500	1	39.00
300253	10	16	500	1	45.00
300254	10	18	500	1	62.00
300255	10	20	500	1	75.00
300256	15	20	500	1	50.00
300257	10	22	500	1	86.00
300258	15	22	500	1	62.00
300259	10	25	500	1	112.00
300260	15	25	500	1	101.00
300261	10	27	500	1	143.00
300262	15	27	500	1	122.00
300263	10	30	500	1	162.00
300264	15	30	500	1	154.00
300265	20	30	500	1	142.00
300266	20	33	500	1	163.00
300267	10	35	500	1	210.00
300268	20	35	500	1	189.00
300269	25	35	500	1	167.00
300270	20	40	500	1	230.00
300271	25	40	500	1	206.00
300272	30	40	500	1	180.00
300273	20	45	500	1	316.00
300274	25	45	500	1	274.00
300275	30	45	500	1	228.00
300276	25	50	500	1	373.00
300277	30	50	500	1	316.00
300278	40	50	500	1	201.00
300279	20	55	500	1	400.00
300280	30	55	500	1	329.00
300281	40	55	500	1	239.00
300282	20	60	500	1	434.00
300283	30	60	500	1	375.00
300284	40	60	500	1	290.00

Item	Inside Ø mm	Outside Ø mm	Length mm	Unit piece	Price EURO
300285	20	65	500	1	531.00
300286	30	65	500	1	463.00
300287	40	65	500	1	387.00
300288	50	65	500	1	295.00
300289	6	10	1,000	1	42.00
300290	6	12	1,000	1	67.00
300291	8	14	1,000	1	86.00
300292	10	15	1,000	1	72.00
300293	10	16	1,000	1	86.00
300294	10	18	1,000	1	117.00
300295	10	20	1,000	1	143.00
300296	15	20	1,000	1	90.00
300297	10	22	1,000	1	162.00
300298	15	22	1,000	1	117.00
300299	10	25	1,000	1	230.00
300300	15	25	1,000	1	193.00
300301	10	27	1,000	1	268.00
300302	15	27	1,000	1	234.00
300303	10	30	1,000	1	302.00
300304	15	30	1,000	1	291.00
300305	20	30	1,000	1	265.00
300306	20	33	1,000	1	305.00
300307	10	35	1,000	1	365.00
300308	20	35	1,000	1	340.00
300309	25	35	1,000	1	309.00
300310	20	40	1,000	1	398.00
300311	25	40	1,000	1	346.00
300312	30	40	1,000	1	325.00
300313	20	45	1,000	1	538.00
300314	25	45	1,000	1	476.00
300315	30	45	1,000	1	399.00
300316	25	50	1,000	1	620.00
300317	30	50	1,000	1	543.00
300318	40	50	1,000	1	345.00
300319	20	55	1,000	1	674.00
300320	30	55	1,000	1	562.00
300321	40	55	1,000	1	409.00
300322	20	60	1,000	1	712.00
300323	30	60	1,000	1	613.00
300324	40	60	1,000	1	390.00
300325	20	65	1,000	1	828.00
300326	30	65	1,000	1	746.00
300327	40	65	1,000	1	625.00
300328	50	65	1,000	1	467.00

Vulkollan®-Pipe - Shore 92°

Product specification
- Hard elastic behaviour, weather resistant, can be machine processed

Technical specification
- **Material:** PUR (polyurethane based on polyesterpolyol / DESMODUR®15)
- **Colour:** brown
- **Shore hardness A:** 92° ±5 (DIN 53505)
- **Temperature range:** -40 to +80 °C
- **Density:** 1.26 g/cm^3
- **Type of production:** cast and tempered

Item	Inside Ø mm	Outside Ø mm	Tolerance outside Ø mm	Length mm	Unit piece	Price EURO
302254	28.5	52	±0.45	250	1	138.00
302255	28.5	52	±0.45	500	1	205.00
302258	29.5	71	±0.45	250	1	199.00
302259	29.5	71	±0.45	500	1	264.00
302260	35	90	±0.6	250	1	243.00
302256	39	67	±0.45	250	1	183.00
302257	39	67	±0.45	500	1	255.00
302261	39	81	±0.6	250	1	216.00
302262	48	81	±0.6	250	1	224.00
302264	59	112	±0.6	250	1	312.00
302263	77	112	±0.6	245	1	285.00

THOMAPLAST®-Pipe made of PVC (rigid)

Product specification
- High mechanical stability
- UV-stabilized
- Good dielectrical properties
- Good chemical resistance
- Resistant to weather and corrosion
- Bondable and weldable

Technical specification
- **Material:** rigid PVC (rigid polyvinyl chloride)
- **Colour:** dark-grey
- **Density:** 1.42 g/cm^3
- **Design:** extruded
- **Temperature range:** 0 to +60 °C, for a short time +75 °C

Item	Inside Ø mm	Outside Ø mm	Tolerance outside Ø mm	Length mm	Unit piece	Price EURO
301984	4	6	+0.2 / -0	500	2	17.00
301985	4	6	+0.2 / -0	1,000	2	25.00
301986	6	8	+0.2 / -0	500	2	19.00
301987	6	8	+0.2 / -0	1,000	2	31.00

Item	Inside Ø mm	Outside Ø mm	Tolerance outside Ø mm	Length mm	Unit piece	Price EURO
301988	7.6	10	+0.2 / -0	500	2	22.00
301989	7.6	10	+0.2 / -0	1,000	2	37.00
301990	9.2	12	+0.2 / -0	500	2	25.00
301991	9.2	12	+0.2 / -0	1,000	2	39.00
301992	13.6	16	+0.2 / -0	500	2	27.00
301993	13.6	16	+0.2 / -0	1,000	2	43.00
301994	17	20	+0.2 / -0	500	1	22.00
301995	17	20	+0.2 / -0	1,000	1	33.00
301996	21.2	25	+0.2 / -0	500	1	23.00
301997	21.2	25	+0.2 / -0	1,000	1	34.00
301998	27.2	32	+0.2 / -0	500	1	25.00
301999	27.2	32	+0.2 / -0	1,000	1	40.00
302000	36.2	40	+0.2 / -0	500	1	27.00
302001	36.2	40	+0.2 / -0	1,000	1	41.00
302002	42.6	50	+0.2 / -0	250	1	32.00
302003	42.6	50	+0.2 / -0	500	1	49.00
302004	42.6	50	+0.2 / -0	1,000	1	80.00
302005	63.8	75	+0.3 / -0	250	1	32.00
302006	63.8	75	+0.3 / -0	500	1	49.00
302007	63.8	75	+0.3 / -0	1,000	1	80.00

THOMASTABIL®-Tubes made of Glass Fiber Reinforced Plastic GFRP

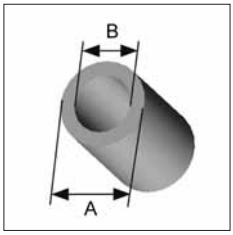
Application area:
- Laboratory technology, electroplating technology, electrical engineering

General product specification:
- Self-extinguishing and halogen-free
- Linear stress-strain behavior
- Low weight
- Electrically insulating
- Chemical-resistant
- Corrosion-resistant and weatherproof
- UV-resistant
- High economic efficiency
- High stability
- Metal-free, unmagnetic
- Thermally insulating
- The unsaturated polyester resins are among the most commonly used resins in composite materials. UP resins are a colourless to slightly yellow solution of unsaturated polyester in a reactive solvent, usually styrene. At room temperature or by supply of heat, they are cured, whereby a heat reaction is released.

General technical specification:
- **Material:**
  Resin: polyester
  Reinforcing fibers: glass fibers
- **Design:** pultruded
- **Color:** dark gray / white
- **Density:** 2 g/cm^3
- **Temperature range:** -100 to +155 °C, for a short time +180 °C
- **Impact toughness (IZOD):** 300 kJ/m^2
- **Interlaminar shear strength:** 25 MPa
- **Volume resistivity:** 10^{10} - 10^{15} Ohm * cm
- **Surface resistance:** 10^{10} - 10^{15} Ohm
- **Breakdown strength:** 5 - 10 kV/mm
- **Comparative tracking index (CTI):** KA 3c / KB 500 / KC 600
- **Dielectric constant:** <5
- **Coefficient of linear thermal expansion:** 12 x 10^{-6} 1/K
- **Thermal conductivity:** 0.2 - 0.6 W/m*K
- **Specific heat capacity:** 1.0 - 1.2 kJ/kg*K
- **Water absorption:** 0.15 %
- **Dimensional stability by Martens method:** +200 °C
- **Resistance to glow heat:** level 2b
- **Elongation at break:** 1.0 - 1.8 %
- **Barcol hardness:** >40
- **Tolerances:**
  Pipe diameter: 0 - 10 mm ±0.20 mm, 10 - 20 mm ±0.30 mm, 20 - 40 mm ±0.35 mm
  Wall thickness: 0 - 2 mm ±0.30 mm, 2 - 5 mm ±0.35 mm, 5 - 10 mm ±0.40 mm
- **Fire class:** B2, UL94 V-1, UL 94 V-0, DIN 5510 S4 SR2, ST2, ASTM E84 < 25, ASTM D635
  All following measured values are depending on the test direction: parallel (II) or perpendicular (+) to the fibers.
- **Tensile strength:** II: 250 MPa; +: 30-80 MPa
- **Tension stress:** II: 135 MPa (short-term); 70 MPa (long-term)

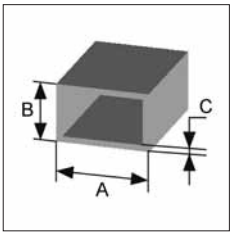
THOMASTABIL®-Tube made of Glass Fiber Reinforced Plastic GFRP

Product spezification
- The pultruded GFRP tubes are not suitable for internal pressure actions on applications.



Item	B mm	A mm	Unit mm	Price EURO
306450	14	20	500	36.00
306451	14	20	1,000	60.00
306452	17	22	500	38.00
306453	17	22	1,000	64.00
306454	22	28	500	44.00
306455	22	28	1,000	74.00
306456	20	30	500	48.00
306457	20	30	1,000	80.00
306458	24	30	500	50.00
306459	24	30	1,000	85.00
306460	26	32	500	60.00
306461	26	32	1,000	98.00
306462	32	40	500	68.00
306463	32	40	1,000	112.00

THOMASTABIL®-Rectangular Tube made of Glass Fiber Reinforced Plastic GFRP



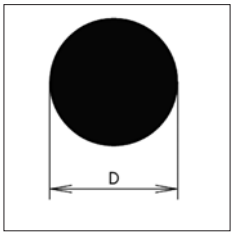
Item	A mm	B mm	C mm	Unit mm	Price EURO
306470	30	15	2.5	500	50.00
306471	30	15	2.5	1,000	84.00
306472	30	30	2.5	500	72.00
306473	30	30	2.5	1,000	106.00
306474	38	38	3	500	92.00
306475	38	38	3	1,000	154.00
306476	40	40	5	500	112.00
306477	40	40	5	1,000	188.00

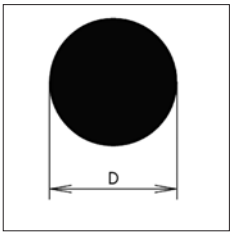
Cords (0.8 - 30 mm)

THOMAPLAST®-High-Tech Round Cord made of CR

Product specification
- Good elastic behavior
- Good abrasion resistance
- Good heat resistance
- Good resistance to weather, aging, and ozone
- High flame-resistance
- Good chemical resistance to dilute acids and alkalis as well as mineral oils

Technical specification
- **Material:** CR (chloroprene rubber)
- **Colour:** black
- **Shore hardness A:** 60° ±5° (DIN 53505)
- **Temperature range:** -25 to +90 °C



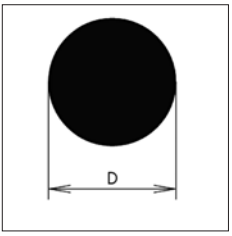


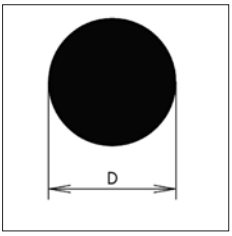
Item	Outside Ø mm	Tolerance mm	Weight g/m	Unit m	Price EURO
13307	2	±0.35	4	5	39.00
13308	2	±0.35	4	10	64.00
13309	3	±0.40	9	5	34.00
13310	3	±0.40	9	10	58.00
13311	4	±0.40	16	5	48.00
13312	4	±0.40	16	10	84.00
13313	5	±0.50	25	5	56.00
13314	5	±0.50	25	10	98.00
13315	6	±0.50	35	5	62.00
13316	6	±0.50	35	10	108.00
13317	7	±0.70	48	5	74.00
13318	7	±0.70	48	10	130.00
13319	8	±0.70	63	5	80.00
13320	8	±0.70	63	10	140.00
13321	9	±0.70	79	5	121.00
13322	9	±0.70	79	10	223.00
13323	10	±0.70	98	5	128.00
13324	10	±0.70	98	10	222.00
13325	12	±0.80	141	3	98.00
13326	12	±0.80	141	5	140.00
13327	15	±0.80	221	3	148.00
13328	15	±0.80	221	5	216.00
13329	20	±1.00	393	1	76.00
13330	20	±1.00	393	3	196.00

THOMAPLAST®-High-Tech Round Cord made of EPDM

Product specification
- Very good resistance to weather
- Good elastic behavior
- Good resistance to heat, cold, and aging
- Good resistance to weather, aging, and ozone
- Good chemical resistance to hot water and steam, glycol brake fluids, many acids and alkalis as well as polar solvents.

Technical specification
- **Material:** EPDM (ethylene-propylene-diene rubber)
- **Colour:** black
- **Shore hardness A:** 70° ±5° (DIN 53505)
- **Temperature range:** -25 to +120 °C





Item	Outside Ø mm	Tolerance mm	Weight g/m	Unit m	Price EURO
13333	2	+0.3 / -0.1	4	5	80.00
13334	2	+0.3 / -0.1	4	10	136.00
13335	2.5	+0.3 / -0.1	7	5	85.00
13336	2.5	+0.3 / -0.1	7	10	144.00
13337	3	+0.35 / -0.15	10	5	87.00
13338	3	+0.35 / -0.15	10	10	146.00

Item	Outside Ø mm	Tolerance mm	Weight g/m	Unit m	Price EURO
13339	3.5	+0.35 / -0.15	13	5	90.00
13340	3.5	+0.35 / -0.15	13	10	159.00
13341	4	+0.35 / -0.15	17	5	95.00
13342	4	+0.35 / -0.15	17	10	174.00
13343	5	+0.4 / -0.25	27	5	98.00
13344	5	+0.4 / -0.25	27	10	177.00
13345	5.3	+0.4 / -0.25	30	5	100.00
13346	5.3	+0.4 / -0.25	30	10	182.00
13347	5.7	+0.4 / -0.25	34	5	105.00
13348	5.7	+0.4 / -0.25	34	10	195.00
13349	6	+0.45 / -0.25	38	5	110.00
13350	6	+0.45 / -0.25	38	10	202.00
13351	7	+0.5 / -0.25	52	5	126.00
13352	7	+0.5 / -0.25	52	10	231.00
13353	8	+0.5 / -0.3	68	5	128.00
13354	8	+0.5 / -0.3	68	10	236.00
13355	9	+0.5 / -0.3	85	5	141.00
13356	9	+0.5 / -0.3	85	10	261.00
13357	10	+0.5 / -0.3	105	3	100.00
13358	10	+0.5 / -0.3	105	5	156.00
13359	11	+0.7 / -0.3	126	3	118.00
13360	11	+0.7 / -0.3	126	5	179.00
13361	12	+0.7 / -0.3	150	3	136.00
13362	12	+0.7 / -0.3	150	5	208.00
13363	13	+0.7 / -0.3	175	3	159.00
13364	13	+0.7 / -0.3	175	5	241.00
13365	14	+0.7 / -0.3	203	3	167.00
13366	14	+0.7 / -0.3	203	5	254.00
13367	15	+0.7 / -0.3	232	3	172.00
13368	15	+0.7 / -0.3	232	5	264.00

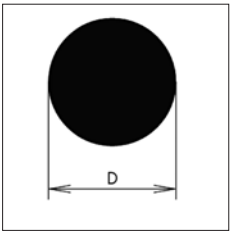
THOMAPLAST®-High-Chem Round Cord made of EPDM/PP - technical

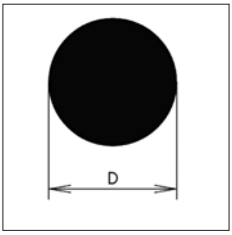
Product specification

- Extremely elastic thermoplastic elastomer
- Very high resistance to many alkalis, acids, oxidants, and polar solvents, except to mineral oils, fuels and hydraulic fluids.
- Very good resistance to aging, ozone, UV-radiation and weather.
- Resistant to hot water and antifreeze agents.
- Suitable for joining with adhesives and heat-sealing.
- Mechanically highly loadable and very good abrasion resistance.
- The material is recyclable.

Technical specification

- **Material:** EPDM/PP (thermoplastic elastomer); compound of EPDM and PP, as well as stabilizing additives; EPDM (ethylene-propylene-diene rubber); PP (polypropylene)
- **Colour:** black
- **Shore hardness A:** 65° ±5° (DIN 53503)
- **Temperature range:** -45 to +120 °C
- **Compressibility:** 24 % at +23 °C / 22 h
- **Tearing strength:** 70 kg/cm²
- **Elongation at break:** 375 %
- **Tolerance:** DIN ISO 3302-1 E2





Item	Outside Ø mm	Unit m	Price EURO
339410	2	5	56.00
339411	2	10	98.00
339412	2.5	5	56.00
339413	2.5	10	98.00
339414	3	5	56.00
339415	3	10	98.00
339416	3.5	5	64.00
339417	3.5	10	112.00
339418	4	5	72.00
339419	4	10	126.00
339420	5	5	76.00
339421	5	10	130.00
339422	5.33	5	78.00
339423	5.33	10	138.00
339424	6	5	82.00
339425	6	10	144.00
339426	7	5	98.00
339427	7	10	170.00
339428	8	5	104.00
339429	8	10	182.00
339430	9	5	118.00
339431	9	10	204.00
339432	10	5	140.00
339433	10	10	240.00
339434	11	5	148.00
339435	11	10	252.00
339436	12	5	162.00
339437	12	10	275.00
339438	14	5	210.00
339439	14	10	350.00
339440	15	5	232.00
339441	15	10	378.00
339442	16	5	250.00
339443	16	10	400.00
339444	18	5	292.00
339445	18	10	454.00
339446	20	5	320.00
339447	20	10	480.00

THOMAPLAST®-High-Pharm Round Cord made of EPDM/PP - FDA

Application area

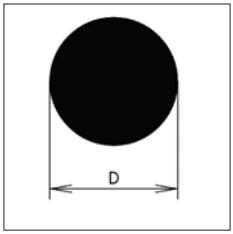
- Pharmaceutical technology, medical engineering, food technology, container construction, beverage industry, biotechnology, chemical technology, filling technics, machine engineering, cellar technology

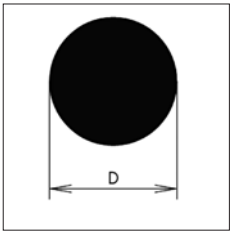
Product specification

- Extremely elastic thermoplastic elastomer for pharmaceutical engineering, food technology, and medical engineering
- Very high resistance to many alkalis, acids, oxidants, and polar solvents, except to mineral oils, fuels, hydraulic fluids, and hydrocarbons.
- Very good resistance to aging, ozone, UV-radiation and weather
- Suitable for joining with adhesives and heat-sealing
- Mechanically highly loadable, dimensionally stable and resistant to bending.

Technical specification

- **Material:** EPDM/PP (thermoplastic elastomer); compound of EPDM and PP, as well as stabilizing additives; EPDM (ethylene-propylene-diene rubber); PP (polypropylene)
- **Colour:** beige
- **Shore hardness A:** 64° ±5° (DIN 53503)
- **Temperature range:** -45 to +135 °C, for a short time +150 °C
- **Density:** 0.97 g/cm^3
- **Compression set:** 24 % at +23 °C / 22 h
- **Tearing strength:** 70 kg/cm^2
- **Elongation at break:** 375 %
- **Tolerance:** DIN ISO 3302-1 E2
- **Regulations:** FDA § 177.2600; conforming to LMBG (German Food and Commodities Act)





Item	Outside Ø mm	Unit m	Price EURO
302607	2	5	70.00
302608	2	15	180.00
302609	3	5	78.00
302610	3	15	198.00
302611	4	5	88.00
302612	4	15	226.00
302613	5	5	102.00
302614	5	15	264.00
302615	6	5	124.00
302616	6	15	318.00
302617	7	5	154.00
302618	7	15	396.00
302619	8	5	168.00
302620	8	15	432.00
302621	9	5	196.00
302622	9	15	494.00
302623	10	5	228.00
302624	10	15	576.00
302625	12	5	252.00
302626	12	15	602.00

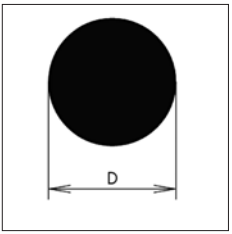
THOMAPLAST®-High-Tech Round Cord made of FPM

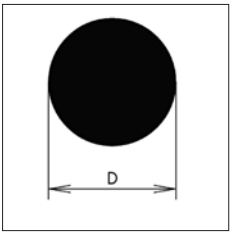
Product specification

- Very good resistance to ozone, oxygen, aging, and weather
- Very good heat resistance
- Very good chemical resistance, especially to mineral, vegetable, and animal oils, fuels, many alkalis, acids, and solvents
- Not resistant to polar solvents

Technical specification

- **Material:** FPM (fluorinated rubber)
- **Colour:** black
- **Shore hardness A:** 75° ± 5° (DIN 53505)
- **Temperature range:** -20 to +200 °C, for a short time +220 °C
- **Tolerance:** DIN ISO 3302-1 E2





Item	Outside Ø mm	Tolerance mm	Weight g/m	Unit m	Price EURO
13487	2	+0.3 / -0.1	6	1	39.00
13488	2	+0.3 / -0.1	6	3	105.00
13489	2.5	+0.3 / -0.2	10	1	46.00
13490	2.5	+0.3 / -0.2	10	3	126.00
13491	3	+0.3 / -0.2	13	1	49.00
13492	3	+0.3 / -0.2	13	3	136.00
13493	3.5	+0.3 / -0.2	18	1	54.00
13494	3.5	+0.3 / -0.2	18	3	151.00
13495	4	+0.4 / -0.2	23	1	57.00
13496	4	+0.4 / -0.2	23	3	156.00
13497	4.5	+0.4 / -0.2	30	1	64.00
13498	4.5	+0.4 / -0.2	30	3	172.00
13499	5	+0.4 / -0.3	36	1	69.00
13500	5	+0.4 / -0.3	36	3	192.00
13501	5.3	+0.4 / -0.3	41	1	77.00
13502	5.3	+0.4 / -0.3	41	3	218.00
13503	5.7	+0.4 / -0.3	47	1	80.00
13504	5.7	+0.4 / -0.3	47	3	215.00
13505	6	+0.4 / -0.3	52	1	87.00
13506	6	+0.4 / -0.3	52	3	241.00
13507	6.5	+0.4 / -0.3	61	1	92.00
13508	6.5	+0.4 / -0.3	61	3	254.00
13509	7	+0.5 / -0.3	70	1	100.00
13510	7	+0.5 / -0.3	70	3	271.00
13511	8	+0.5 / -0.3	92	1	105.00
13512	8	+0.5 / -0.3	92	3	289.00
13513	8.4	+0.5 / -0.3	102	1	113.00
13514	8.4	+0.5 / -0.3	102	3	300.00
13515	9	+0.5 / -0.3	117	1	116.00
13516	9	+0.5 / -0.3	117	3	302.00
13517	10	+0.5 / -0.35	145	1	118.00
13518	10	+0.5 / -0.35	145	3	310.00

Item	Outside Ø mm	Tolerance mm	Weight g/m	Unit m	Price EURO
13519	11	+0.55 / -0.35	174	1	126.00
13520	12	+0.55 / -0.35	207	1	128.00
13521	14	+0.6 / -0.4	282	1	141.00
13522	15	+0.6 / -0.4	324	1	156.00
13523	18	E2 DIN 7715	440	1	172.00
13524	20	E2 DIN 7715	598	1	197.00
13525	25	E2 DIN 7715	747	1	305.00

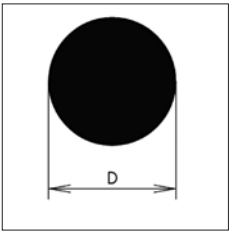
THOMAPLAST®-High-Tech Round Cord made of NBR - Shore 50°

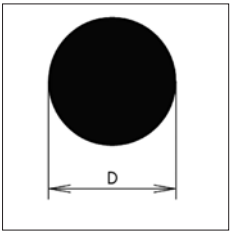
Product specification

- Good abrasion resistance
- Good heat resistance
- Good resistance to mineral oils and fuels, best resistance to vegetable and animal oils, silicones, as well as dilute acids and alkalis at room temperature

Technical specification

- **Material:** NBR (butadiene-acrylonitrile rubber, nitrile rubber)
- **Colour:** black
- **Shore hardness A:** 50° ±5° (DIN 53505)
- **Temperature range:** -30 to +100 °C





Item	Outside Ø mm	Tolerance mm	Weight g/m	Unit m	Price EURO
13249	3	±0.35	8.5	5	49.00
13250	3	±0.35	8.5	10	90.00
13251	4	±0.35	15	5	49.00
13252	4	±0.35	15	10	90.00
13253	5	±0.40	23	5	54.00
13254	5	±0.40	23	10	100.00
13255	6	±0.40	34	5	72.00
13256	6	±0.40	34	10	136.00
13257	7	±0.50	46	5	92.00
13258	7	±0.50	46	10	161.00
13259	8	±0.50	60	5	100.00
13260	8	±0.50	60	10	192.00
13261	10	±0.50	93	5	141.00
13262	10	±0.50	93	10	259.00
13263	12	±0.50	135	3	118.00
13264	12	±0.50	135	5	182.00

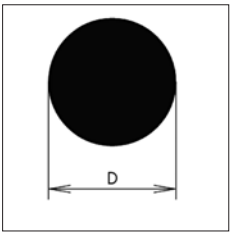
THOMAPLAST®-High-Tech Round Cord made of NBR - Shore 70°

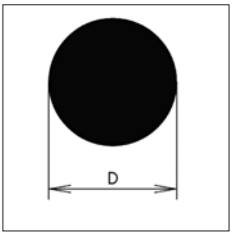
Product specification

- Good abrasion resistance
- Good heat resistance
- Good resistance to mineral oils and fuels, best resistance to vegetable and animal oils, silicones, as well as dilute acids and alkalis at room temperature

Technical specification

- **Material:** NBR (butadiene-acrylonitrile rubber, nitrile rubber)
- **Colour:** black
- **Shore hardness A:** 65° or 70° ±5° (DIN 53505)
- **Temperature range:** -30 to +100 °C
- **Tolerance:** DIN ISO 3302-1 E2





Item	Outside Ø mm	Tolerance mm	Weight g/m	Unit m	Price EURO
13369	1	+0.20 / -0	1	5	36.00
13370	1	+0.20 / -0	1	10	62.00
13371	1.5	+0.20 / -0.10	2	5	39.00
13372	1.5	+0.20 / -0.10	2	10	64.00
13373	1.78	+0.20 / -0.10	3	5	41.00
13374	1.78	+0.20 / -0.10	3	10	72.00
13375	2	+0.30 / -0.10	4	5	44.00
13376	2	+0.30 / -0.10	4	10	77.00
13377	2.5	+0.30 / -0.10	6	5	46.00
13378	2.5	+0.30 / -0.10	6	10	82.00
13379[1]	3	+0.35 / -0.15	9	5	52.00
13380[1]	3	+0.35 / -0.15	9	10	90.00
13381	3.2	+0.35 / -0.15	10	5	54.00
13382	3.2	+0.35 / -0.15	10	10	95.00
13383	3.53	+0.35 / -0.15	12	5	57.00
13384	3.53	+0.35 / -0.15	12	10	98.00
13385[1]	4	+0.35 / -0.15	16	5	59.00
13386[1]	4	+0.35 / -0.15	16	10	105.00
13387	4.75	+0.45 / -0.20	22	5	62.00
13388	4.75	+0.45 / -0.20	22	10	108.00
13389[1]	5	+0.45 / -0.20	25	5	64.00
13390[1]	5	+0.45 / -0.20	25	10	113.00
13391	5.33	+0.45 / -0.20	28	5	67.00
13392	5.33	+0.45 / -0.20	28	10	116.00
13393	5.7	+0.45 / -0.20	32	5	69.00
13394	5.7	+0.45 / -0.20	32	10	118.00
13395[1]	6	+0.45 / -0.20	35	5	72.00
13396[1]	6	+0.45 / -0.20	35	10	126.00
13397	6.4	+0.45 / -0.20	40	5	75.00
13398	6.4	+0.45 / -0.20	40	10	128.00
13399[1]	7	+0.50 / -0.20	48	5	77.00

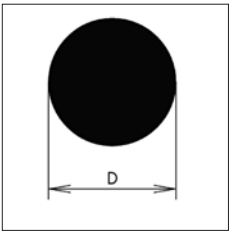
Item	Outside Ø mm	Tolerance mm	Weight g/m	Unit m	Price EURO
13400[1]	7	+0.50 / -0.20	48	10	133.00
13401	7.5	+0.50 / -0.20	55	5	80.00
13402	7.5	+0.50 / -0.20	55	10	136.00
13403[1]	8	+0.50 / -0.20	63	5	82.00
13404[1]	8	+0.50 / -0.20	63	10	139.00
13405	8.4	+0.50 / -0.20	70	5	87.00
13406	8.4	+0.50 / -0.20	70	10	156.00
13407	9	+0.50 / -0.20	80	5	100.00
13408	9	+0.50 / -0.20	80	10	182.00
13409	9.5	+0.50 / -0.20	88	5	103.00
13410	9.5	+0.50 / -0.20	88	10	187.00
13411[1]	10	+0.55 / -0.30	100	5	105.00
13412[1]	10	+0.55 / -0.30	100	10	190.00
13413	11	+0.55 / -0.30	120	5	121.00
13414	11	+0.55 / -0.30	120	10	220.00
13415[1]	12	+0.55 / -0.30	143	5	128.00
13416[1]	12	+0.55 / -0.30	143	10	236.00
13417	12.7	+0.55 / -0.30	157	5	136.00
13418	12.7	+0.55 / -0.30	157	10	248.00
13419	13	+0.55 / -0.30	166	5	141.00
13420	13	+0.55 / -0.30	166	10	259.00
13421	14	+0.60 / -0.30	191	3	90.00
13422	14	+0.60 / -0.30	191	5	139.00
13423	15	+0.60 / -0.30	222	3	92.00
13424	15	+0.60 / -0.30	222	5	149.00
13425	16	+0.60 / -0.30	250	3	108.00
13426	16	+0.60 / -0.30	250	5	164.00
13427	18	+0.80 / -0.40	320	3	116.00
13428	18	+0.80 / -0.40	320	5	177.00
13429	20	+0.80 / -0.50	395	3	128.00
13430	20	+0.80 / -0.50	395	5	197.00
13431	22	+0.80 / -0.50	487	3	146.00
13432	22	+0.80 / -0.50	487	5	223.00
13433	25	+0.80 / -0.50	617	1	80.00
13434	25	+0.80 / -0.50	617	3	215.00
13435	30	+0.80 / -0.50	888	1	116.00
13436	30	+0.80 / -0.50	888	3	305.00

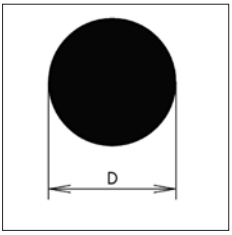
[1] Shore hardness A: 65° ±5°

THOMAPLAST®-High-Tech Round Cord made of NR - beige

Product specification
- High tearing strength
- Very good elastic, mechanical properties
- Very high abrasion resistance
- High cohesive friction
- Good resistance to acids and alkalis

Technical specification
- **Material:** NR (natural rubber)
- **Colour:** beige, similar to RAL 1001
- **Shore hardness A:** 45° ±5° (DIN 53505)
- **Temperature range:** -40 to +80 °C



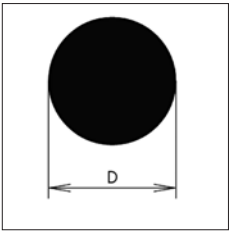


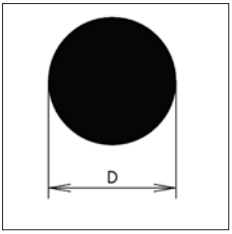
Item	Outside Ø mm	Tolerance mm	Weight g/m	Unit m	Price EURO
13221	3	±0.40	9	5	39.00
13222	3	±0.40	9	10	67.00
13223	4	±0.40	17	5	57.00
13224	4	±0.40	17	10	105.00
13225	5	±0.50	25	5	67.00
13226	5	±0.50	28	10	120.00
13227	6	±0.50	35	5	82.00
13228	6	±0.50	35	10	149.00
13229	7	±0.70	50	5	100.00
13230	7	±0.70	50	10	187.00
13231	8	±0.70	65	5	120.00
13232	8	±0.70	65	10	220.00
13233	10	±0.70	100	3	100.00
13234	10	±0.70	100	5	156.00
13235	12	±0.80	145	3	138.00
13236	12	±0.80	145	5	210.00
13237	20	±1.00	395	1	110.00
13238	20	±1.00	395	3	299.00

THOMAPLAST®-High-Pharm Round Cord made of NR - red

Product specification
- High tearing strength
- Very good elastic, mechanical properties
- Very high abrasion resistance
- High cohesive friction
- Good resistance to acids and alkalis

Technical specification
- **Material:** NR (natural rubber)
- **Colour:** red
- **Shore hardness A:** 50° ±5° (DIN 53505)
- **Temperature range:** -40 to +80 °C
- **Regulations:** conforming to FDA and BfR





Item	Outside Ø mm	Tolerance mm	Weight g/m	Unit m	Price EURO
13199	3	±0.40	9	5	75.00
13200	3	±0.40	9	10	151.00
13201	4	±0.40	16	5	80.00
13202	4	±0.40	16	10	138.00
13203	5	±0.50	25	5	87.00
13204	5	±0.50	25	10	156.00
13205	6	±0.50	34	5	100.00
13206	6	±0.50	34	10	187.00
13207	7	±0.70	46	5	120.00
13208	7	±0.70	46	10	223.00
13209	8	±0.70	61	5	131.00
13210	8	±0.70	61	10	238.00
13211	10	±0.70	96	3	97.00
13212	10	±0.70	96	5	151.00
13213	12	±0.80	138	3	108.00
13214	12	±0.80	138	5	161.00
13215	14	±0.80	188	3	126.00
13216	14	±0.80	188	5	197.00
13217	15	±0.80	216	3	141.00
13218	15	±0.80	216	5	217.00
13219	20	±1.00	383	1	72.00
13220	20	±1.00	383	3	187.00

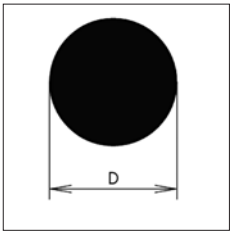
THOMAPLAST®-High-Tech Round Cord made of Silicone

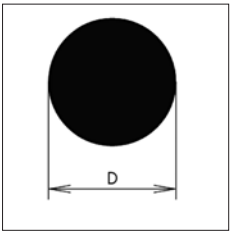
Product specification

- Extremely wide temperature range
- Excellent resistance to heat and cold
- Excellent resistance to hot air
- Very good resistance to aging, weather, and ozone
- Very good dielectrical properties
- Good elastic behavior
- Antiadhesive (repellent) surface
- Good chemical resistance to many synthetic, animal, and vegetable oils, glycols, flame-resistant hydraulic fluids, and certain solvents.
- Poor chemical resistance to mineral oils, solvents, acids, and alkalis (individual testing required).

Technical specification

- **Material:** silicone (silicone rubber)
- **Colour:** reddish brown
- **Shore hardness A:** 60° ±5° (DIN 53505)
- **Temperature range:** -60 to +220 °C, for a short time +250 °C
- **Tolerance:** DIN ISO 3302-1 E2





Item	Outside Ø mm	Unit m	Price EURO
331227	2	5	46.00
331228	2	10	74.00
331229	3	5	50.00
331230	3	10	80.00
331231	4	5	52.00
331232	4	10	94.00
331233	5	5	56.00
331234	5	10	98.00
331235	6	5	58.00
331236	6	10	104.00
331237	7	5	66.00
331238	7	10	122.00
331239	8	5	72.00
331240	8	10	126.00
331241	9	5	74.00
331242	9	10	136.00
331243	10	5	88.00
331244	10	10	156.00
331245	11	5	100.00
331246	11	10	182.00
331247	12	5	112.00
331248	12	10	204.00
331249	13	5	124.00
331250	13	10	230.00
331251	14	5	138.00
331252	14	10	258.00
331253	15	5	156.00
331254	15	10	286.00
331255	20	5	272.00
331256	20	10	466.00

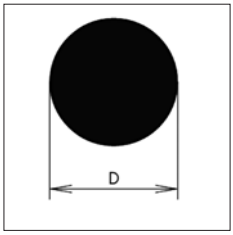
THOMAPLAST®-High-Med Round Cord made of Silicone - Pharmaceutical

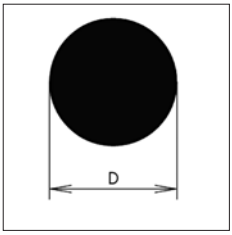
Product specification

- Best cold resistance
- Excellent resistance to heat and hot air
- Very good resistance to aging, weather, and ozone
- Very good dielectrical properties
- Very good physiological properties
- Good elastic behavior
- Antiadhesive (repellent) surface
- High permeability to gases
- Good chemical resistance to synthetic, animal, and vegetable oils, glycols, flame-resistant hydraulic fluids, certain solvents
- Low chemical resistance to mineral oils, solvents, acids, and alkalis (to be tested in each particular case)

Technical specification

- **Material:** silicone (silicone rubber)
- **Colour:** translucent
- **Shore hardness A:** 60° ±5° (DIN 53505)
- **Temperature range:** -60 to +200 °C, for a short time +230 °C
- **Tolerance:** DIN ISO 3302-1 E2
- **Regulations:** according to DAB X, BfR XV and FDA §177.2600





Item	Outside Ø mm	Unit m	Price EURO
13437	1	5	54.00
13438	1	10	90.00
13439	2	5	57.00
13440	2	10	92.00
13441	3	5	59.00
13442	3	10	95.00
13443	4	5	62.00
13444	4	10	110.00
13445	5	5	64.00
13446	5	10	116.00
13447	6	5	67.00
13448	6	10	121.00
13449	7	5	75.00
13450	7	10	136.00
13451	8	5	80.00
13452	8	10	141.00
13453	9	5	82.00
13454	9	10	151.00
13455	10	5	98.00
13456	10	10	174.00
13457	11	5	110.00
13458	11	10	202.00
13459	12	5	121.00
13460	12	10	220.00
13461	13	5	136.00
13462	13	10	251.00
13463	14	5	151.00
13464	14	10	279.00
13465	15	5	169.00
13466	15	10	310.00
13467	16	3	113.00
13468	16	5	172.00
13469	17	3	123.00
13470	17	5	187.00
13471	18	3	136.00
13472	18	5	210.00
13473	19	3	146.00
13474	19	5	223.00
13475	20	3	162.00
13476	20	5	243.00
13477	21	3	177.00
13478	21	5	269.00
13479	22	1	75.00
13480	22	3	187.00
13481	23	1	82.00
13482	23	3	205.00
13483	24	1	87.00
13484	24	3	223.00
13485	25	1	95.00
13486	25	3	254.00

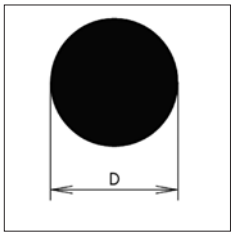
THOMAPLAST®-High-Therm-Round Cord made of Silicone - High-Temperature

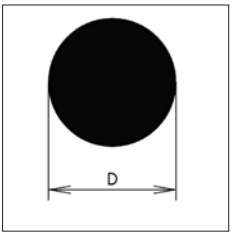
Product specification

- Superelastic special silicone compound
- Mechanical properties do not change even at highest temperature load
- High-temperature silicone is extruded from particularly high-grade silicone elastomer and vulcanized
- Vulcanized products do not contain any extractable components and are completely tasteless and odorless
- Excellent thermal and heat resistance
- Best cold resistance
- Very good resistance to weather, aging, and ozone
- Very good dielectrical properties
- Antiadhesive (repellent) surface
- Low chemical resistance to mineral oils, solvents, acids, and alkalis (to be tested in each particular case).

Technical specification

- **Material:** silicone (silicone rubber)
- **Colour:** grey
- **Shore hardness A:** 58° ±5° (DIN 53505)
- **Density:** 1.15 ±0.03 g/cm³ (DIN 53479)
- **Temperature range:** -50 to +250 °C, for a short time +300 °C
- **Tearing strength:** >6 MPa
- **Elongation at break:** 250 %
- **Tolerance:** DIN ISO 3302-1 E2
- **Regulations:** conforming to FDA





Item	Outside Ø mm	Unit m	Price EURO
191261	2	5	29.00
191271	2	10	53.00
191281	3	5	47.00
191291	3	10	83.00
191301	4	5	57.00
191311	4	10	101.00
191321	5	5	64.00
191331	5	10	118.00
191341	6	5	73.00
191351	6	10	126.00
191381	8	5	100.00
191391	8	10	159.00

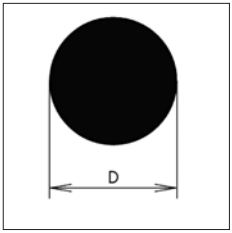
Item	Outside Ø mm	Unit m	Price EURO
191401	10	5	150.00
191411	10	10	202.00
191421	12	5	156.00
191431	12	10	228.00
191441	14	5	183.00
191451	14	10	243.00
191461	16	5	221.00
191471	16	10	294.00
191481	20	5	345.00
191491	20	10	458.00

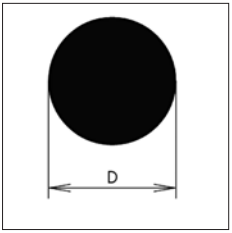
THOMAPLAST®-High-Flexible Round Cord made of TPE - Food

Application area
- Sealing technology, engineering operations and maintenance, plant construction, container construction in pharmaceutical engineering and food processing technology

Product specification
- Suitable for food
- Very good elastic properties
- Good cold and thermal resistance
- Excellent resistance to weather and aging
- Good mechanical loadability

Technical specification
- **Material:** TPE-S (thermoplastic elastomer)
- **Compound:** SEBS (styrene block copolymer)
- **Colour:** light beige
- **Shore hardness A:** 45° ±5°
- **Temperature range:** -50 to +95 °C; for a short time +150 °C (at damp heat)
- **Elongation at break:** 350 %
- **Tolerance:** DIN ISO 3302-1 E2
- **Regulations:** BfR; conforming to FDA





Item	Outside Ø mm	Unit m	Price EURO
339464	2	5	46.00
339465	2	10	78.00
339466	2.5	5	46.00
339467	2.5	10	78.00
339468	3	5	48.00
339469	3	10	82.00
339470	3.5	5	52.00
339471	3.5	10	88.00
339472	4	5	58.00
339473	4	10	98.00
339474	5	5	66.00
339475	5	10	108.00
339476	5.33	5	70.00
339477	5.33	10	118.00
339478	6	5	78.00
339479	6	10	132.00
339480	7	5	84.00
339481	7	10	140.00
339482	8	5	96.00
339483	8	10	160.00
339484	9	5	102.00
339485	9	10	170.00
339486	10	5	114.00
339487	10	10	190.00
339488	11	5	120.00
339489	11	10	216.00
339490	12	5	142.00
339491	12	10	226.00
339492	14	5	168.00
339493	14	10	252.00
339494	16	5	212.00
339495	16	10	318.00
339496	18	5	238.00
339497	18	10	348.00
339498	20	5	280.00
339499	20	10	408.00

THOMAPLAST®-High-Tech Round Cord made of PTFE

Product specification
- Made of PTFE, for versatile use in all laboratories for tieing and dipping of devices in aggressive media.

Technical specification
- **Material:** PTFE (polytetrafluoroethylene)
- **Colour:** white
- **Temperature range:** -240 to +260 °C, for a short time +280 °C
- **Design:** unsintered, oil free and coiled

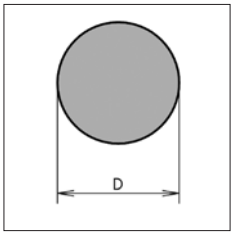
Item	Outside Ø mm	Length m	Unit piece	Price EURO
60280	0.8	60	1	102.00
60281	1.2	30	1	102.00
60282	1.6	30	1	151.00
60283	2	15	1	98.00
301195	2.4	15.25	1	105.00

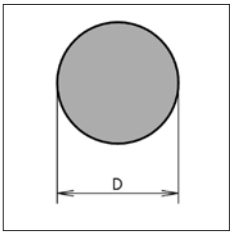
Item	Outside Ø mm	Length m	Unit piece	Price EURO
60285	3	15	1	156.00
301196	4	10.7	1	121.00
301197	7.2	2.6	1	95.00

THOMAPLAST®-Foam Rubber Round Cord made of CR

Product specification
- Good abrasion resistance, good elastic behavior
- Good resistance to aging, weather, and ozone
- High flame-resistance
- Good chemical resistance to dilute acids and alkalis as well as mineral oils

Technical specification
- **Material:** CR (chloroprene rubber)
- **Colour:** grey (similar to RAL 7001)
- **Shore hardness A:** 15° ±5° (DIN 53505)
- **Temperature range:** -25 to +80 °C
- **Density:** approx. 0.50 g/cm^3
- **Tolerance:** DIN ISO 3302-1 E3
- **Design:** foamed, all over with closed skin, open cured



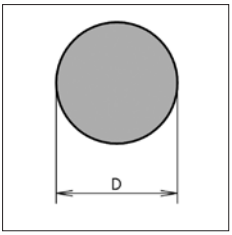


Item	Outside Ø mm	Tolerance mm	Weight g/m	Unit m	Price EURO
13655	2	±0.5	2	5	34.00
13656	2	±0.5	2	10	57.00
13657	3	±0.7	3	5	36.00
13658	3	±0.7	3	10	62.00
13659	4	±0.8	8	5	39.00
13660	4	±0.8	8	10	52.00
13661	5	±0.8	13	5	41.00
13662	5	±0.8	13	10	69.00
13663	6	±0.8	18	5	54.00
13664	6	±0.8	18	10	95.00
13665	7	±1.0	25	5	69.00
13666	7	±1.0	25	10	121.00
13667	8	±1.0	33	5	75.00
13668	8	±1.0	33	10	128.00
13669	9	±1.0	41	5	80.00
13670	9	±1.0	41	10	144.00
13671	10	±1.0	51	5	85.00
13672	10	±1.0	51	10	156.00
13673	12	±1.3	74	5	90.00
13674	12	±1.3	74	10	162.00
13675	13	±1.3	86	5	100.00
13676	13	±1.3	86	10	182.00
13677	15	±1.3	115	5	121.00
13678	15	±1.3	115	10	220.00
13679	18	±1.6	165	3	108.00
13680	18	±1.6	165	5	164.00
13681	25	±1.6	319	1	64.00
13682	25	±1.6	319	3	156.00
13683	30	±2.0	503	1	87.00
13684	30	±2.0	503	3	220.00

THOMAPLAST®-Foam Rubber Round Cord made of EPDM

Product specification
- High tearing strength
- Very good resistance to weather
- Outstanding elastic behaviour
- Good resistance to aging, good chemical resistance to acids and alkalis

Technical specification
- **Material:** EPDM (ethylene-propylene-diene rubber)
- **Colour:** black
- **Shore hardness A:** 20° ±5° (DIN 53505)
- **Temperature range:** -40 to +125 °C
- **Density:** 0.60 ±0.10 g/cm^3
- **Tolerance:** DIN ISO 3302-1 E3
- **Design:** foamed, with closed skin



Item	Outside Ø mm	Weight g/m	Unit m	Price EURO
339953	2	2	5	35.00
339954	2	2	10	59.00
339955	3	3	5	41.00
339956	3	3	10	69.00
339957	4	8	5	42.00
339958	4	8	10	70.00
339959	5	13	5	49.00
339960	5	13	10	83.00
339961	6	18	5	55.00
339962	6	18	10	93.00
339963	7	25	5	64.00
339964	7	25	10	105.00
339965	8	33	5	75.00
339966	8	33	10	120.00
339967	10	51	5	114.00
339968	10	51	10	182.00
339969	12	74	5	124.00
339970	12	74	10	198.00
339971	15	115	5	139.00

Item	Outside Ø mm	Weight g/m	Unit m	Price EURO
339972	15	115	10	230.00
339973	20	210	3	81.00
339974	20	210	5	108.00
339975	25	319	3	89.00
339976	25	319	5	115.00
339977	30	459	3	95.00
339978	30	459	5	131.00

THOMAPLAST®-High-Chem Foam Rubber Round Cord made of FPM

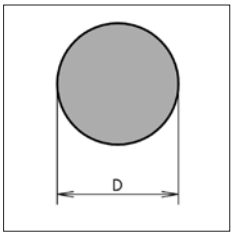
Product specification
- Flexible foam rubber with a fluorine content ≥66 %
- Abrasion-resistant outer skin
- Extremely high flexibility and permanent elasticity, also after hot/cold cycles
- Outstanding sealing force even at lowest surface pressure
- Highest life cycle also at highest compressive set
- Gastight sealing even at lowest surface pressure
- Excellent deformation bridging
- Good recovery
- Very good resistance to ozone, oxygen, weather, and aging
- Good flame resistance, self-extinguishing
- Excellent resistance to mineral oils, fats, fuels, hydrocarbons, chlorinated solvents
- Resistant to water, steam, alcohols even at high temperatures

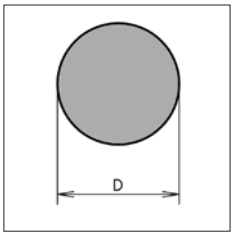
Technical specification
- **Material:** FPM (fluorinated rubber), foamed
- **Colour:** black
- **Shore hardness A:** 30°
- **Density:** 0.8 - 0.9 g/cm³ (DIN 53479A)
- **Elongation at break:** 300 % (DIN 53571)
- **Compression set:** 25 % at +70 °C / 24 h (VPA2)
- **Temperature range:** -20 to +215 °C, for a short time up to +280 °C
- **Tolerance:** DIN ISO 3302-1 E3

Item	Outside Ø mm	Unit m	Price EURO
340628	3	5	52.00
340629	3	10	92.00
28851	4	1	19.00
28852	4	3	51.00
340630	4	5	76.00
340631	4	10	132.00
28853	5	1	24.00
28854	5	3	65.00
340632	5	5	98.00
340633	5	10	176.00
28855	6	1	35.00
28856	6	3	93.00
340634	6	5	142.00
340635	6	10	248.00
28857	7	1	48.00
28859	7	3	129.00
340636	7	5	194.00
340637	7	10	304.00
28860	8	1	64.00
28861	8	3	172.00
340638	8	5	260.00
340639	8	10	462.00
28862	9	1	79.00
28863	9	3	189.00
28864	10	1	96.00
28865	10	3	261.00
340640	10	5	396.00
340641	10	10	692.00
28866	11	1	99.00
28867	11	3	269.00
28868	12	1	106.00
340642	12	3	268.00
340643	12	5	358.00
340644	15	1	112.00
340645	15	3	277.00
340646	18	1	163.00
340647	18	3	389.00
340648	20	1	238.00
340649	20	3	592.00
340650	22	1	264.00
340651	22	3	648.00
340652	25	1	312.00
340653	25	3	744.00
340654	30	1	412.00
340655	30	3	886.00

THOMAPLAST®-High-Tech Foam Rubber Round Cord made of TPE - conforming to FDA

Application area
- Seal technics, containers for food and pharmaceutical products





Product specification
- Suitable for food
- Very good elastic properties
- Good cold and thermal resistance
- Excellent resistance to weather and aging
- Good mechanical loadability

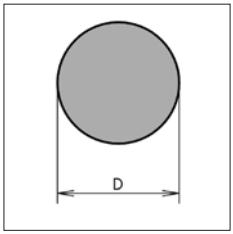
Technical specification
- **Material:** TPE-S (thermoplastic elastomer)
- **Compound:** SEBS (styrene block copolymer)
- **Colour:** white
- **Shore hardness A:** 25° ±5°
- **Temperature range:** -50 to +95 °C
- **Density:** 0.50 ±0.10 g/cm³
- **Tolerance:** DIN ISO 3302-1 E2
- **Regulations:** conforming to FDA

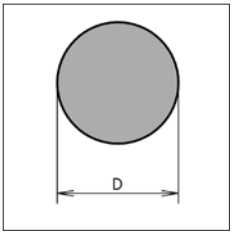
Item	Outside Ø mm	Unit m	Price EURO
340437	3	5	53.00
340438	3	10	84.00
340439	4	5	55.00
340440	4	10	88.00
340441	5	5	60.00
340442	5	10	96.00
340443	6	5	70.00
340444	6	10	112.00
340445	7	5	75.00
340446	7	10	120.00
340447	8	5	85.00
340448	8	10	136.00
340449	10	5	98.00
340450	10	10	145.00

THOMAPLAST®-High-Tech Foam Rubber Round Cord made of Silicone

Product specification
- Very good elastic behavior
- Excellent heat resistance
- Outstanding resistance to cold
- Very good elongation at break and elastic force
- Very good resistance to ozone, aging, and weather
- Very good dielectrical (non-conducting) properties
- Antiadhesive surface

Technical specification
- **Material:** silicone (silicone rubber)
- **Colour:** white
- **Shore hardness A:** 15° ±5°
- **Temperature range:** -50 to +200 °C
- **Density:** approx. 0.25 g/cm³ (DIN 53505)
- **Tearing strength:** >500 kPa
- **Elongation at break:** >200 %
- **Thermal conductivity:** 0.07 W/mk (±25 %) at +125 °C
- **Dielectric strength:** 23 kV/mm (±25 %)
- **Design:** all over with skin, fine-pored closed cells





Item	Outside Ø mm	Unit m	Price EURO
340506	3	5	26.00
340507	3	10	46.00
340508	4	5	30.00
340509	4	10	52.00
340510	5	5	34.00
340511	5	10	60.00
340512	6	5	40.00

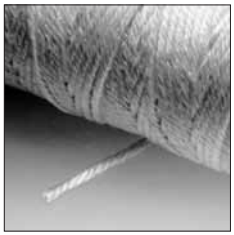
Item	Outside Ø mm	Unit m	Price EURO
340513	6	10	70.00
340514	8	5	50.00
340515	8	10	88.00
340516	10	5	68.00
340517	10	10	120.00
340518	12	5	84.00
340519	12	10	146.00
340520	14	5	102.00
340521	14	10	178.00
340522	15	5	118.00
340523	15	10	204.00
340524	20	5	176.00
340525	20	10	352.00
340526	25	3	194.00
340527	25	5	332.00

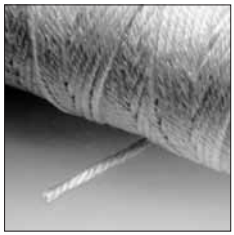
THOMAPLAST®-High-Therm-Glass Fibre Fabric Cord - asbestos-free

Application area
- Thermal insulating

Product specification
- Highest heat resistance
- High heat stability
- Very high mechanical stability
- Non-combustible
- Very good chemical resistance to oils, fats, alkalis, organic acids and vapors
- Best suited for thermal insulation
- Ø 3-6 mm twined, Ø 8-10 mm left/right twisted and additionally knitted around.

Technical specification
- **Material:** glass fibre, made of EC 9 filament yarn, textured
- **Special features:** asbestos-free
- **Temperature range:** -10 to +450 °C, for a short time +550 °C





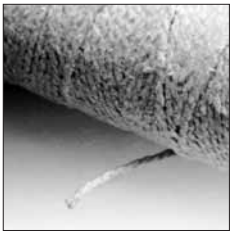
Item	Outside Ø mm	Unit m	Price EURO
302269	3	2	44.00
302270	3	5	80.00
302271	5	2	47.00
302272	5	5	87.00
302273	6	2	48.00
302274	6	5	88.00
302277	8	2	54.00
302278	8	5	98.00

Item	Outside Ø mm	Unit m	Price EURO
302281	10	2	82.00
302282	10	5	120.00

THOMAPLAST®-High-Therm-Ceramic Fabric Cord - asbestos-free

Product specification
- Highest heat resistance
- Absolutely highest heat stability
- Non-combustible
- Very high mechanical stability
- Good chemical resistance, very high to oils, fats, all chemicals, steam and water as well as liquid metals (aluminum, zinc etc.), not suitable for hydrofluoric acid, phosphoric acid, and some strong alkalis.

Technical specification
- **Material:** ceramic composition reinforced with chromium steel wire
- **Special features:** round and twisted, asbestos-free
- **Temperature range:** -10 to +1,100 °C



Item	Outside Ø mm	Weight g/m	Unit m	Price EURO
302331	3	5	2	49.00
302332	3	5	5	89.00
302333	4	8	2	50.00
302334	4	8	5	94.00
302335	5	13	2	53.00
302336	5	13	5	99.00
302337	6	16	2	54.00
302338	6	16	5	101.00
302339	8	25	2	58.00
302340	8	25	5	109.00
302341	10	39	2	65.00
302342	10	39	5	122.00
302343	12	57	2	78.00
302344	12	57	5	145.00
302345	15	96	2	101.00
302346	15	96	5	188.00
302347	20	172	2	152.00
302348	20	172	5	289.00

THOMAPLAST®-Cable made of Stainless Steel - FEP-Coated

Product specification
- Stranded cable made of stainless steel, seamlessly coated with translucent, white FEP.

Item	Outside Ø mm	Unit m	Price EURO
12022	2.4	5	87.00
12023	2.4	10	144.00
12024	2.4	15	174.00

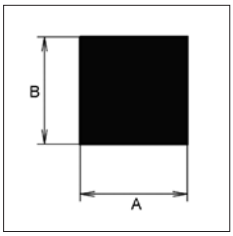
Profiles
Elastomers

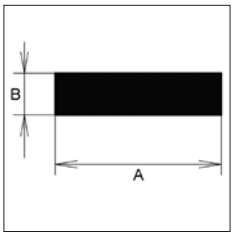
THOMAPLAST®-Profiles made of CR

General product specification
- Good elastic behavior
- Good abrasion resistance
- Good resistance to aging, weather, and ozone
- High flame-resistance
- Good resistance to diluted acids and alkalis, limited resistance to mineral oils (swelling)
- Poor resistance to solvents and steam
- Chemical features:
  CR is a all-round synthetic rubber basing on polychloroprene. Chloroprene rubber is vulcanized in different systems influencing parameters such as compressibility, oil resistance, weather resistance, and tendency to crystallization.
  Use in contact with mineral oils possible, although swelling is stronger compared to NBR, depending on the respective compound specification.

THOMAPLAST®-Rectangular Profile made of CR

Technical specification
- **Material:** CR (chloroprene rubber)
- **Colour:** black
- **Shore hardness A:** 65° ±5° (DIN 53505)
- **Temperature range:** -20 to +90 °C
- **Tolerance:** DIN ISO 3302-1 E2



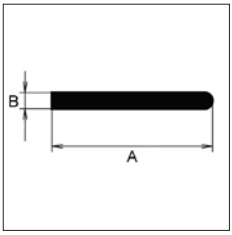


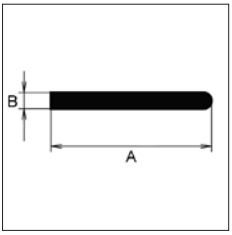
Item	A mm	B mm	Weight g/m	Unit m	Price EURO
13526	3	3	12	5	69.00
13527	3	3	12	10	121.00
13528	5	5	33	5	80.00
13529	5	5	33	10	136.00
13530	6	6	47	5	85.00
13531	6	6	47	10	156.00
13532	8	8	84	5	139.00
13533	8	8	84	10	254.00
13534	10	10	130	5	131.00
13535	10	10	130	10	238.00
13536	12	12	188	5	136.00
13537	12	12	188	10	243.00
13538	14	14	260	3	108.00
13539	14	14	260	5	162.00
13540	16	16	295	3	116.00
13541	16	16	295	5	177.00
13542	20	20	525	3	133.00
13543	20	20	525	5	202.00
13544	10	1	13	5	49.00
13545	10	1	13	10	87.00
13546	15	1	20	5	52.00
13547	15	1	20	10	92.00
13548	20	1	26	5	54.00
13549	20	1	26	10	100.00
13550	30	1	39	5	72.00
13551	30	1	39	10	136.00
13552	10	2	26	5	80.00
13553	10	2	26	10	144.00
13554	15	2	39	5	87.00
13555	15	2	39	10	161.00
13556	20	2	52	5	95.00
13557	20	2	52	10	172.00
13558	25	2	65	5	108.00
13559	25	2	65	10	194.00
13560	30	2	78	5	110.00
13561	30	2	78	10	200.00
13562	40	2	105	5	113.00
13563	40	2	105	10	205.00
13564	15	3	59	5	100.00
13565	15	3	59	10	182.00
13566	20	3	78	5	115.00
13567	20	3	78	10	207.00
13568	25	3	98	5	126.00
13569	25	3	98	10	233.00
13570	10	4	52	5	80.00
13571	10	4	52	10	146.00
13572	20	4	105	5	133.00
13573	20	4	105	10	240.00
13574	30	4	160	5	138.00
13575	30	4	160	10	253.00
13576	40	4	210	3	105.00
13577	40	4	210	5	166.00
13578	10	5	65	5	113.00
13579	10	5	65	10	208.00
13580	15	5	98	5	118.00
13581	15	5	98	10	215.00
13582	20	5	130	5	136.00
13583	20	5	130	10	251.00
13584	25	5	165	5	141.00
13585	25	5	165	10	261.00
13586	30	5	195	5	143.00
13587	30	5	195	10	263.00
13588	40	5	260	3	97.00
13589	40	5	260	5	161.00
13590	50	5	325	3	105.00
13591	50	5	325	5	159.00
13592	60	5	390	3	108.00
13593	60	5	390	5	161.00
13594	30	6	240	3	136.00
13595	30	6	240	5	210.00
13596	40	6	315	3	177.00
13597	40	6	315	5	271.00
13598	10	8	105	3	90.00
13599	10	8	105	5	138.00
13600	40	8	416	3	100.00
13601	40	8	416	5	156.00
13602	15	10	195	3	90.00
13603	15	10	195	5	138.00
13604	20	10	260	3	100.00
13605	20	10	260	5	156.00
13606	30	10	390	3	115.00
13607	30	10	390	5	174.00
13608	40	10	520	3	146.00
13609	40	10	520	5	225.00
13610	30	12	470	3	115.00
13611	30	12	470	5	174.00
13612	40	12	625	3	166.00
13613	40	12	625	5	253.00
13614	20	15	390	3	105.00
13615	20	15	390	5	159.00
13616	30	15	590	3	151.00
13617	30	15	590	5	233.00
13618	30	20	780	1	75.00
13619	30	20	780	3	146.00

THOMAPLAST®-Rectangular Profile made of CR - with round shoulder

Technical specification

- **Material:** CR (chloroprene rubber)
- **Colour:** black
- **Shore hardness A:** 65° ±5° (DIN 53505)
- **Temperature range:** -25 to +90 °C
- **Density:** 1.42 g/cm^3
- **Tearing strength:** 8.5 MPa
- **Elongation at break:** 450 %
- **Compression set:** 25 % at +70 °C / 22 h
- **Volume resistivity:** 3 x 10^{10} Ohm x cm
- **Tolerance:** DIN ISO 3302-1 E2
- **Design:** with round shoulder (on one side)



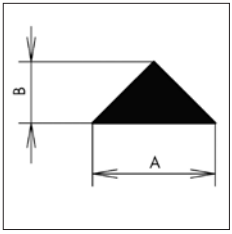


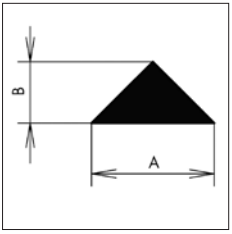
Item	A mm	B mm	Weight g/m	Unit m	Price EURO
331355	30	3	120	5	128.00
331356	30	3	120	10	242.00
331357	40	3	155	3	110.00
331358	40	3	155	5	172.00
331359	50	3	195	3	110.00
331360	50	3	195	5	172.00
331361	60	3	235	3	124.00
331362	60	3	235	5	192.00

THOMAPLAST®-Triangular Profile made of CR

Technical specification

- **Material:** CR (chloroprene rubber)
- **Colour:** black
- **Shore hardness A:** 65° ±5° (DIN 53505)
- **Temperature range:** -25 to +90 °C
- **Density:** 1.42 g/cm^3
- **Tearing strength:** 8.5 MPa
- **Elongation at break:** 450 %
- **Compression set:** 25 % at +70 °C / 22 h
- **Volume resistivity:** 3 x 10^{10} Ohm x cm
- **Tolerance:** DIN ISO 3302-1 E2
- **Design:** triangular shape (scalene)



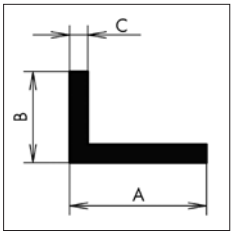


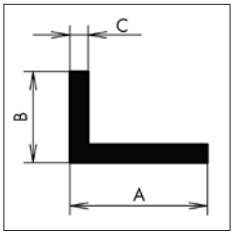
Item	A mm	B mm	Weight g/m	Unit m	Price EURO
331363	10	5	33	5	106.00
331364	10	5	33	10	188.00

THOMAPLAST®-L-Profile made of CR

Technical specification

- **Material:** CR (chloroprene rubber)
- **Colour:** black
- **Shore hardness A:** 65° ±5° (DIN 53505)
- **Temperature range:** -25 to +90 °C
- **Density:** 1.42 g/cm^3
- **Tearing strength:** 8.5 Mpa
- **Elongation at break:** 450 %
- **Compression set:** 25 % at +70 °C / 22 h
- **Volume resistivity:** 3 x 10^{10} Ohm x cm
- **Tolerance:** DIN ISO 3302-1 E2
- **Design:** L-shaped (scalene)





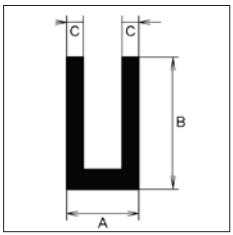
Item	A mm	B mm	A mm	Unit m	Price EURO
331365	10	6	1.5	5	98.00
331366	10	6	1.5	10	180.00
331367	15	10	2	5	98.00
331368	15	10	2	10	180.00
331369	20	15	3	3	104.00
331370	20	15	3	5	156.00
331371	30	20	5	3	116.00
331372	30	20	5	5	172.00
331373	50	50	5	3	202.00
331374[1]	50	50	5	5	292.00

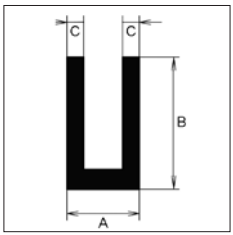
[1] V-shaped delivery

THOMAPLAST®-U-Profile made of CR - with angled shoulder

Technical specification

- **Material:** CR (chloroprene rubber)
- **Colour:** black
- **Shore hardness A:** 65° ±5° (DIN 53505)
- **Temperature range:** -25 to +90 °C
- **Density:** 1.42 g/cm^3
- **Tearing strength:** 8.5 MPa
- **Elongation at break:** 450 %
- **Compression set:** 25 % at +70 °C / 22 h
- **Volume resistivity:** 3 x 10^{10} Ohm x cm
- **Tolerance:** DIN ISO 3302-1 E2
- **Design:** U-profile with angled shoulder



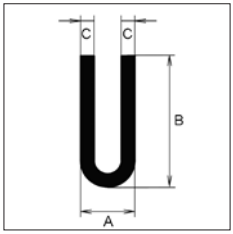


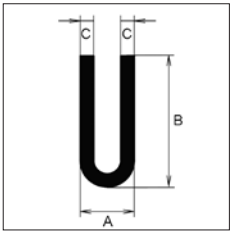
Item	A mm	B mm	C mm	Unit m	Price EURO
331389	8	13	2	5	124.00
331390	8	13	2	10	228.00
331391	6.35	8	1.1	3	128.00
331392	6.35	8	1.1	5	198.00
331393	8	10	1.5	5	116.00
331394	8	10	1.5	10	210.00
331395	11	15	2.5	3	102.00
331396	11	15	2.5	5	160.00
331397	9	18	1.5	5	124.00
331398	9	18	1.5	10	228.00
331399	13	22	2.5	3	104.00
331400	13	22	2.5	5	162.00
331401	15	25	2.5	3	116.00
331402	15	25	2.5	5	180.00

THOMAPLAST®-U-Profile made of CR - with round shoulder

Technical specification

- **Material:** CR (chloroprene rubber)
- **Colour:** black
- **Shore hardness A:** 65° ±5° (DIN 53505)
- **Temperature range:** -25 to +90 °C
- **Density:** 1.42 g/cm^3
- **Tearing strength:** 8.5 MPa
- **Elongation at break:** 450 %
- **Compression set:** 25 % at +70 °C / 22 h
- **Volume resistivity:** 3 x 10^{10} Ohm x cm
- **Tolerance:** DIN ISO 3302-1 E2
- **Design:** U-profile with round shoulder





Item	A mm	B mm	C mm	Unit m	Price EURO
331403	3	15	1	5	106.00
331404	3	15	1	10	196.00
331405	5	10	1.5	5	106.00
331406	5	10	1.5	10	196.00
331407	6	12	2	5	106.00
331408	6	12	2	10	196.00
331409	4	24	1	5	126.00
331410	4	24	1	10	234.00
331411	5.5	18	1.25	5	124.00
331412	5.5	18	1.25	10	230.00
331413	6	19	1.5	5	124.00
331414	6	19	1.5	10	230.00
331415	7	20	1	5	116.00
331416	7	20	1	10	218.00
331417	10	25	2.5	3	110.00
331418	10	25	2.5	5	172.00

THOMAPLAST®-Profiles made of EPDM

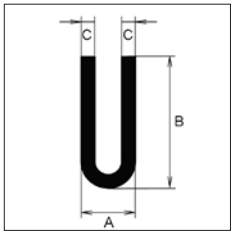
General product specification

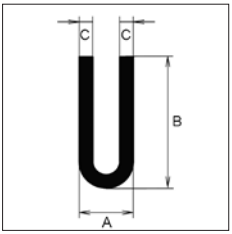
- Very good resistance to weather and aging
- Good cold and thermal resistance
- Excellent elastic behaviour
- Outstanding elongation at break and tearing strength
- Very good resistance to acids and alkalis
- Good resistance to hot water, hot steam, glycols, brake fluids, and polar solutions
- Poor resistance to mineral oils and fuels
- Chemical features:
  EPDM is a sulfur vulcanized synthetic rubber containing diene components. The terpolymer EPDM is of outstanding stability to oxygen and ozone. Its chemical properties cause its excellent resistance to light, aging, and weather.

THOMAPLAST®-U-Profile made of EPDM - with round shoulder

Technical specification

- **Material:** EPDM (ethylene-propylene-diene rubber or terpolymer rubber)
- **Colour:** black
- **Shore hardness A:** 60° ±5° (DIN 53505)
- **Temperature range:** -25 to +100 °C
- **Density:** 1.14 g/cm^3
- **Elongation at break:** 280 %
- **Tearing strength:** 11 MPa
- **Compression set:** 11 % at +100 °C / 70 h
- **Volume resistivity:** <10^6 Ohm x cm
- **Design:** U-profile with round shoulder





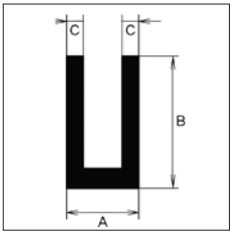
Item	A mm	B mm	C mm	Unit m	Price EURO
331454	3	10	1	5	80.00
331455	3	10	1	10	142.00
331456	5	15	1.75	5	104.00
331457	5	15	1.75	10	178.00
331458	6	15	2	5	110.00
331459	6	15	2	10	186.00
331460	4	21	1	5	104.00
331461	4	21	1	10	178.00
331462	6	24	2	5	122.00
331463	6	24	2	10	208.00

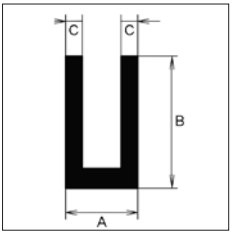
Item	A mm	B mm	C mm	Unit m	Price EURO
331464	7	19	2	5	130.00
331465	7	19	2	10	222.00
331466	7	20	1.5	5	122.00
331467	7	20	1.5	10	214.00
331468	8	20	2	5	124.00
331469	8	20	2	10	218.00
331470	9	20	2	5	130.00
331471	9	20	2	10	226.00

THOMAPLAST®-U-Profile made of EPDM - with angled shoulder

Technical specification

- **Material:** EPDM (ethylene-propylene-diene rubber or terpolymer rubber)
- **Colour:** black
- **Shore hardness A:** 60° ±5° (DIN 53505)
- **Temperature range:** -25 to +100 °C
- **Density:** 1.14 g/cm^3
- **Elongation at break:** 280 %
- **Tearing strength:** 11 MPa
- **Compression set:** 11 % at +100 °C / 70 h
- **Volume resistivity:** <10^6 Ohm x cm
- **Design:** U-profiles with angled shoulder





Item	A mm	B mm	C mm	Unit m	Price EURO
331438	6	10	1.5	5	104.00
331439	6	10	1.5	10	184.00
331440	5	15	1	5	110.00
331441	5	15	1	10	192.00
331442	10	20	3	3	98.00
331443	10	20	3	5	142.00
331444	10	10	2	3	90.00
331445	10	10	2	5	130.00
331446	12	15	3	3	96.00
331447	12	15	3	5	138.00
331448	16	16	4	3	108.00
331449	16	16	4	5	160.00
331450	25	25	5	3	138.00
331451	25	25	5	5	196.00
331452	30	30	5	3	146.00
331453	30	30	5	5	208.00

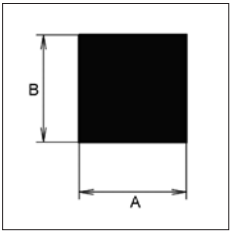
THOMAPLAST®-High-Chem Rectangular Profile made of EPDM/PP

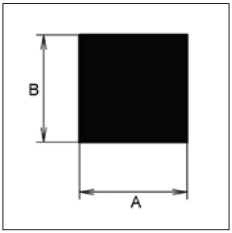
Product specification

- Extremely elastic thermoplastic elastomer
- Very high resistance to many alkalis, acids, oxidants, and polar solvents, except to mineral oils, fuels and hydraulic fluids.
- Very good resistance to aging, ozone, UV-radiation and weather.
- Resistant to hot water and antifreeze agents.
- Suitable for joining with adhesives and heat-sealing.
- Mechanically highly loadable and very good abrasion resistance.
- The material is recyclable.

Technical specification

- **Material:** EPDM/PP (thermoplastic elastomer); compound of EPDM and PP, as well as stabilizing additives; EPDM (ethylene-propylene-diene rubber); PP (polypropylene)
- **Colour:** black
- **Shore hardness A:** 65° ±5° (DIN 53505)
- **Temperature range:** -45 to +130 °C, for a short time +150 °C
- **Compressibility:** 24 % at +23 °C / 22 h
- **Tearing strength:** 70 kg/cm^2
- **Elongation at break:** 375 %
- **Tolerance:** DIN ISO 3302-1 E2





Item	A mm	B mm	Unit m	Price EURO
339448	4	4	5	75.00
339449	4	4	10	135.00
339450	5	5	5	80.00
339451	5	5	10	144.00
339452	6	6	5	90.00
339453	6	6	10	162.00
339454	8	8	5	100.00
339455	8	8	10	176.00
339456	10	10	5	120.00
339457	10	10	10	210.00
339458	12	12	5	160.00
339459	12	12	10	280.00
339460	14	14	5	192.00
339461	14	14	10	330.00
339462	15	15	5	210.00
339463	15	15	10	360.00
340931	16	16	5	228.00
340932	16	16	10	372.00
340933	18	18	5	236.00
340934	18	18	10	388.00
340935	20	20	5	286.00
340936	20	20	10	444.00
340937	25	25	5	302.00

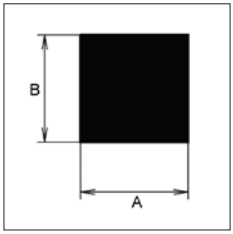
Item	A mm	B mm	Unit m	Price EURO
340938	25	25	10	408.00
340939	30	30	5	462.00
340940	30	30	10	616.00

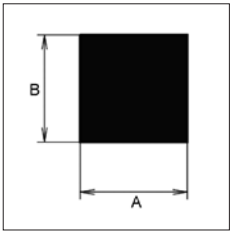
THOMAPLAST®-Rectangular Profile made of FPM

Application area
- Sealing technology, chemical plant building, laboratory technology, machine engineering and apparatus construction, for gas and oil pipelines

Product specification
- Outstanding chemical resistance, especially to mineral, vegetable, and animal oils, hydraulic fluids, amines, fuels, oxidants, many acids and alkalis, as well as aliphatic, aromatic and halogenated hydrocarbons.
- Limited resistance to polar solvents (swelling)
- Very good resistance to ozone, oxygen, aging and weather
- Outstanding temperature resistance

Technical specification
- **Material:** FPM (fluorinated rubber)
- **Material quality:** 100 % fluoroelastomer
- **Colour:** black
- **Shore hardness A:** 75° ±5° (DIN 53505)
- **Temperature range:** -25 to +250 °C, for a short time +300 °C
- **Tolerance:** DIN ISO 3302-1 E2





Item	A mm	B mm	Unit m	Price EURO
13626	3	3	1	115.00
13627[1]	3	3	3	315.00
13628[1]	3	3	5	490.00
19289	5	5	1	39.00
19290	5	5	3	98.00
19291	5	5	5	133.00
19292	6	6	1	41.00
19293	6	6	3	123.00
19294	6	6	5	164.00
19295	8	8	1	87.00
19296	8	8	3	218.00
19297	8	8	5	292.00
19298	10	10	1	126.00
19299	10	10	3	315.00
19300	10	10	5	422.00
19301	12	12	1	182.00
19302	12	12	3	450.00
19303	12	12	5	601.00
19304	14	14	1	223.00
19305	14	14	3	550.00
19306	14	14	5	714.00
19307	16	16	1	294.00
19308	16	16	3	724.00
19309	16	16	5	939.00

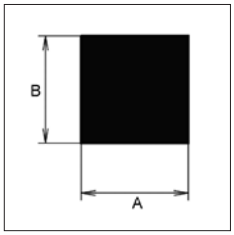
[1] one meter pieces

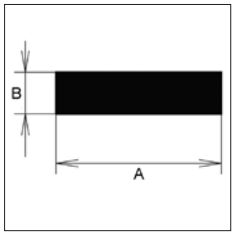
THOMAPLAST®-Rectangular Profile made of NBR

Application area
- Sealing technology, chemical technology, petrochemistry, machine engineering and apparatus construction

Product specification
- Good abrasion resistance
- Optimal thermal resistance
- Resistant to mineral oil, vegetable oils, greases, fuels, alcohols, glycols and aliphatic solvents, as well as dilute acids and alkalis at room temperature.

Technical specification
- **Material:** NBR (butadiene-acrylonitrile rubber)
- **Colour:** black
- **Shore hardness A:** 65° ±5°
- **Temperature range:** -10 to +100 °C, for a short time +120 °C
- **Tolerance:** DIN ISO 3302-1 E2





Item	A mm	B mm	Unit m	Price EURO
340690	5	5	5	36.00
340691	5	5	10	64.00
340692	8	8	5	68.00
340693	8	8	10	102.00
340694	10	5	5	58.00
340695	10	5	10	96.00
340696	10	10	5	84.00
340697	10	10	10	132.00
340698	20	5	5	86.00
340699	20	5	10	138.00
340700	20	10	5	158.00
340701	20	10	10	264.00
340702	20	20	5	302.00
340703	20	20	10	452.00

To provide you with the best possible information about the application areas of our products, we take great care to give you a detailed, precise and technically up-to-date description.
However, please note, that we cannot be held liable for any errors. Any values given are recommendations only that have been tested under normal conditions.

We suggest, that you test the product under the appropriate conditions determined by your specific use of the application.

If you need any help, we will gladly share our experiences with you to give you further assistance.

The prices in this handbook are valid for the currency area of the „European Union“ !

No minimum order.

Subject to technical and price change.

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Hoses, dosing and connection technology

THOMAPLAST® I-V
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THOMAPOR®
Separation technology

THOMADRIVE®
Drive technology

Examples of the extremely wide range of products are employed in virtually every sector of industry.

The spectrum extends from hoses and fluids technology through elastomers and semi-finished products, plastics and bonding technology to laboratories and filtration technology.

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