



# Catalogue

## Celullar rubber

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## About cellular rubber

Cellular rubber, sponge rubber and foam rubber are all classified as foamed elastomers. Cellular rubber can be used for water, air and oil seals. It is often very soft, which also makes it suitable for thermal insulation and sound absorption.

**Cellular rubber** is a structure of closed cells, open cells or semi-closed cells. The primary trademark of cellular-rubber is excellent compression rate and its ability to regain its original shape.

Applications: parts that are often opened and closed or parted from each other, for example windows, doors, shutters or hatches.

**Foam rubber** has an open cell structure and is used in technical applications as well as in everyday items such as sponges and filters. Due to the large cells and open structure, foam rubber has excellent absorbing abilities. Foam rubber equipped with many pores is often used in mattresses, pillows and lining.

**Sponge rubber** is available with open, closed or semi-closed cells. The difference from cellular-rubber is the skin like surface. The cells are smaller than in foam rubber. Sponge rubber is primarily used as sealing.

All foamed elastomers can be produced from natural components as well as synthetic materials such as SBR, CR, NBR and EPDM rubber. It is also possible to make foamed products from high quality materials such as silicon rubber and Viton®.

## **Cellular-rubber materials**

### **EPDM (Ethylene Propylene Diene Monomer)**

EPDM is part of the group of synthetic rubbers or elastomers which are made in the polymerization of ethylene, propylene and diene. EPDM has excellent resistance to ageing, ozone, oxygen, UV-radiation and numerous acids and alkalis. EPDM is highly recommended for outdoor use due to its superior weather resistance. EPDM is also resistant to steam, water, salts and glycol (anti-freeze). Limited use is advised in applications containing mineral oils, grease and fuels. Temperature range -40°C to +90°C, withstanding temporary peaks in temperature up to +130°.

### **CR (Neoprene, Chloroprene)**

Neoprene is a synthetic rubber which is achieved after the polymerization of chloroprene. The presence of the chlorine atom improves the chemical resistance making it superior to, for example SBR and natural rubber, and gives the rubber better weather, -heat, -ozone withstanding qualities. Neoprene is a very versatile rubber quality. Besides very good mechanical and elastic qualities, neoprene is also resistant to numerous chemicals. Neoprene has average to good resistance to mineral and synthetic oils, grease and fuels. Neoprene has however poor low temperature flexibility. Temperature range -40°C to +120°C.

### **NBR (Nitrile Butadiene Rubber)**

NBR is a synthetic rubber produced from a copolymer of acrylonitrile and 1,3 butadiene and is also known as Nitrile, Perbunan, Buna-N and Hycar. In the production of cellular-rubber PVC is added. NBR has excellent resistance to water, oil, fuel and other petroleum products. It is superior to most elastomers in compression set, cold flow and abrasion resistance. NBR possesses a moderate to average resistance to ozone, sunlight, weather, it does not, however, possess good resistance to aromatic oils, halogenated hydrocarbons, ketones, brake fluids or strong acids. Temperature range -40°C to +100°C.

### **Silicone (Vinyl Methyl Silicone –VMQ)**

The silicone foam-rubber has excellent resistance to temperature extremes. The material is very soft, has very good stress relaxing properties, it is easy to re-shape. It is self-extinguishing and very durable, even in outdoor-use. Silicone foam-rubber has a very good resistance to sunlight, ozone, oxygen and gases. The silicone foam-rubber possesses good electrical insulation properties, water repellency, does not oxidize and is completely toxin-free. However, it has poor tensile strength, tear, abrasion and steam resistance. Temperature range -70°C to +200°C.



### EPDM cellular rubber sheeting without self-adhesive layer

quality : EPDM  
 colour : black  
 cellular structure : closed  
 execution : without adhesive  
 temperature range : -40°C to +95°C  
 density : 120 kg/m<sup>3</sup> (+/- 20)  
 hardness shore 00 : 50 (-10/+5)  
 hardness shore A : ca. 10-15

article code	thickness (mm)	width (mm)	length (mm)
27700002	2	1000	20000
27700003	3	1000	20000
27700004	4	1000	20000
27700005	5	1000	20000
27700006	6	1000	20000
27700008	8	1000	20000
27700010	10	1000	20000
27700012	12	1000	10000
27700015	15	1000	10000
27700020	20	1000	10000
27700025	25	1000	2000
27700030	30	1000	2000
27700040	40	1000	2000
27700050	50	1000	2000



### EPDM Cellular rubber sheeting with self-adhesive, black

quality : EPDM  
 colour : black  
 cellular structure : closed  
 execution : one side self-adhesive layer  
 temperature range : -40°C to +95°C  
 density : 120 kg/m<sup>3</sup> (+/- 20)  
 hardness shore 00 : 50 (-10/+5)  
 hardness shore A : ca. 10-15

article code	thickness (mm)	width (mm)	length (mm)
27710002	2	1000	20000
27710003	3	1000	20000
27710004	4	1000	20000
27710005	5	1000	20000
27710006	6	1000	20000
27710008	8	1000	20000
27710010	10	1000	20000
27710012	12	1000	10000
27710015	15	1000	10000
27710020	20	1000	10000



**EPDM cellular rubber sheeting with self-adhesive layer, white**

quality : EPDM  
 colour : white  
 cellular structure : closed  
 execution : one side self-adhesive layer  
 temperature range : -40°C to +95°C  
 density : 120 kg/m<sup>3</sup> (+/- 5)  
 hardness shore 00 : 40 (+/- 5)  
 hardness shore A : ca. 10-15

article code	thickness (mm)	width (mm)	length (mm)
28010002	2	1000	10000
28010003	3	1000	10000
28010004	4	1000	10000
28010005	5	1000	10000
28010006	6	1000	10000
28010008	8	1000	10000
28010010	10	1000	10000
28010012	12	1000	10000
28010015	15	1000	10000
28010020	20	1000	10000



**EPDM Cellular rubber sheeting with self-adhesive, grey**

quality : EPDM  
 colour : grey  
 cellular structure : closed  
 execution : one side self-adhesive layer  
 temperature range : -40°C to +95°C  
 density : 120 kg/m<sup>3</sup> (+/- 5)  
 hardness shore 00 : 40 (+/- 5)  
 hardness shore A : ca. 10-15

article code	thickness (mm)	width (mm)	length (mm)
28110002	2	1000	10000
28110003	3	1000	10000
28110004	4	1000	10000
28110005	5	1000	10000
28110006	6	1000	10000
28110008	8	1000	10000
28110010	10	1000	10000
28110012	12	1000	10000
28110015	15	1000	10000
28110020	20	1000	10000



### CR cellular rubber sheeting without adhesive

quality : CR  
colour : black  
cellular structure : closed  
execution : without adhesive  
temperature range : -40°C to +120°C  
density : 150 kg/m<sup>3</sup> (+/-25)  
hardness shore 00 : 50 (+/- 5)  
hardness shore A : ca. 10-15

article code	thickness (mm)	width (mm)	length (mm)
27800002	2	1000	20000
27800003	3	1000	20000
27800004	4	1000	20000
27800005	5	1000	20000
27800006	6	1000	20000
27800008	8	1000	20000
27800010	10	1000	20000
27800015	15	1000	10000
27800020	20	1000	2000
27800025	25	1000	2000
27800030	30	1000	2000
27800040	40	1000	2000
27800050	50	1000	2000
27800060	60 (*)	1000	2000
27800080	80 (**)	1000	2000
27800100	100 (***)	1000	2000

**Additional information:**

(\*) this is 2 x 30mm glued

(\*\*) this is 2 x 40mm glued

(\*\*\*) this is 2 x 50mm glued



### Self-adhesive CR cellular rubber sheeting

quality : CR  
colour : black  
cellular structure : closed  
execution : one side self-adhesive layer  
temperature range : -40°C to +120°C  
density : 150 kg/m<sup>3</sup> (+/-25)  
hardness shore 00 : 50 (+/- 5)  
hardness shore A : ca. 10-15

article code	thickness (mm)	width (mm)	length (mm)
27810002	2	1000	20000
27810003	3	1000	20000
27810004	4	1000	20000
27810005	5	1000	20000
27810006	6	1000	20000
27810008	8	1000	20000
27810010	10	1000	20000
27810012	12	1000	10000
27810015	15	1000	10000
27810020	20	1000	10000



### Self-adhesive NBR cellular rubber sheeting

quality : NBR/PVC  
colour : black  
cellular structure : closed  
execution : one side self-adhesive layer  
temperature range : -40°C to +100°C  
density : 195 Kg/m<sup>3</sup> (+/- 25)  
hardness Shore 00 : 55 (+/- 5)  
hardness Shore A : ca. 10 - 15

article code	thickness (mm)	width (mm)	length (mm)
27900002	2	1000	10000
27900003	3	1000	10000
27900004	4	1000	10000
27900005	5	1000	10000
27900006	6	1000	10000
27900008	8	1000	10000
27900010	10	1000	10000





### Silicone foam sheeting

colour : white  
cellular structure : closed  
execution : without adhesive  
temperature range : -70°C to +200°C  
density : 250 Kg/m<sup>3</sup> (+/- 40)  
hardness Shore 00 : 55 (+/- 5)  
hardness Shore A : ca. 10

article code	thickness (mm)	width (mm)	length (mm)
29100002	2	1000	10000
29100003	3	1000	10000
29100004	4	1000	10000
29100005	5	1000	10000
29100006	6	1000	10000
29100008	8	1000	10000
29100010	10	1000	10000
29100012	12	1000	1000
29100015	15	1000	1000
29100020	20	1000	1000
29100025	25	1000	1000



### Silicone foam sheeting with self-adhesive

colour : white  
cellular structure : closed  
execution : one side self-adhesive layer  
temperature range : -70°C to +200°C  
density : 250 Kg/m<sup>3</sup> (+/- 40)  
hardness Shore 00 : 55 (+/- 5)  
hardness Shore A : ca. 10

article code	thickness (mm)	width (mm)	length (mm)
29110002	2	1000	10000
29110003	3	1000	10000
29110004	4	1000	10000
29110005	5	1000	10000
29110006	6	1000	10000
29110008	8	1000	10000
29110010	10	1000	10000

## Polyether foam sheeting

### Applications:

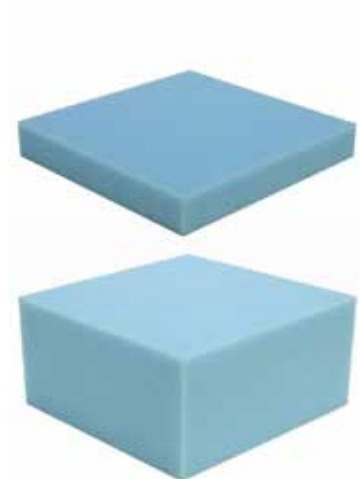
Furniture upholstery, mattresses, thermal insulation, packaging applications and soundproofing.



### Polyether foam sheeting SG 25

quality : polyether foam sheeting  
colour : grey  
cellular structure : open  
material : polyurethane  
temperature range : -10°C to +70°C  
density : 25 Kg/m<sup>3</sup>

article code	thickness (mm)	width (mm)	length (mm)
70002501	10	1200	2100
70002502	20	1200	2100
70002503	30	1200	2100
70002504	40	1200	2100
70002505	50	1200	2100
70002510	100	1200	2100



### Polyether foam sheeting SG 35

quality : polyether foam sheeting  
colour : blue  
cellular structure : open  
material : polyurethane  
temperature range : -10°C to +70°C  
density : 35 Kg/m<sup>3</sup>

article code	thickness (mm)	width (mm)	length (mm)
70003501	10	1200	2100
70003502	20	1200	2100
70003503	30	1200	2100
70003504	40	1200	2100
70003505	50	1200	2100
70003510	100	1200	2100

### Polyether foam sheeting, pyramid profiled SG25



quality	: Polyether foam sheeting, one side pyramid profiled
colour	: grey
cellular structure	: open
material	: polyurethane
temperature range	: -10°C to +70°C
density	: 25 Kg/m <sup>3</sup>
applications	: Where high performance sound absorber is needed e.g. recording studios, conference rooms, garages, industrial applications.

article code	thickness (mm)	measurements (mm)
69002504	40	2000 x 1000
69002507	70	2000 x 1000

### Polyether foam sheeting, pyramid profiled SG25 self-adhesive



quality	: Polyether foam sheeting, one side pyramid profiled
colour	: grey
cellular structure	: open
execution	: one side self-adhesive layer
material	: polyurethane
temperature range	: -10°C to +70°C
density	: 25 Kg/m <sup>3</sup>
applications	: Where high performance sound absorber is needed e.g. recording studios, conference rooms, garages, industrial applications.

article code	thickness (mm)	measurements (mm)
69002505	40	1000 x 500
69002508	70	1000 x 500

Technical data sheet

## EPDM cellular rubber black

material properties	data	standard
cellular structure	closed	
curing agent	peroxide	
colour	black	
temperature range	-40°C / +95°C	
temperature intermittent	+130°C	
density	120 Kg/m <sup>3</sup> (+/- 20)	
hardness Shore 00	40 - 55	ASTM D 2240
hardness Shore A (**)	ca. 10 - 15	
thermal conductivity	0,0501 Wm-1K-1	ASTM C 518-04
elongation	min. 150%	ASTM D 412
tensile strength	4,5 kg/cm <sup>2</sup> (450 kPa)	ASTM D 412
tear resistance	2,8 kg/cm (0,28 kN/m)	ASTM D 624
compression strength (at 25%)	0,35 kg/cm <sup>2</sup> (35 kPa)	ASTM 1056/2000
compression strength (at 50%)	0,7 kg/cm <sup>2</sup> (70 kPa)	ASTM 1056/2000
compression set 25% @ 22 hours	40%	ASTM D 395
compression set (30 mm) 25% @ 22 hours	20%	
fire classification	O.K.	FMVSS 302 - FIAT 50433
water absorption (3 min)	0,13%	ASTM D 1056
hydrochloric acid test (0,02%) 15 min @ 90 °C	max. shrinkage 3%	EN ISO 11195-2/05

### Additional information:

For oil and grease resistant materials, please see our CR (neoprene) or NBR materials.

(\*) The hardness of the cellular rubber materials is measured according to the Shore 00 standard.

(\*\*) The mentioned data according to the Shore A specifications is only mentioned as a guide.

## EPDM cellular grey

material properties	data	standard
material specification	RE 42/2A2	ASTM D 1056
cellular structure	closed	
curing agent	peroxide	
colour	grey (RAL 7033)	
temperature range	-40°C / +95°C	
temperature intermittent	+130°C	
density	120 Kg/m <sup>3</sup> (+/- 10)	
hardness Shore 00 (*)	40 (+/- 5)	ASTM D 2240
hardness Shore A (**)	ca. 10 - 15	
thermal conductivity	0,0501 Wm-1K-1	ASTM C 518-04
linear shrinkage after 22 hours @ 70°C	max. 5%	
elongation	min. 150%	ASTM D 412
tensile strength	4,5 kg/cm <sup>2</sup> (450 kPa)	ASTM D 412
tear resistance	2,8 kg/cm (0,28 kN/m)	ASTM D 624
compression strength (at 25%)	0,35 kg/cm <sup>2</sup> (35 kPa)	ASTM 1056/85
compression strength (at 50%)	0,7 kg/cm <sup>2</sup> (70 kPa)	ASTM 1056/85
compression set 25% @ 22 hours	40%	ASTM D 395
compression set (30 mm) 25% @ 22 hours	20%	
water absorption	2%	ASTM D 1056

### Additional information:

(\*) The hardness of the cellular rubber materials is measured according to the Shore 00 standard.

(\*\*) The mentioned data according to the Shore A specifications is only mentioned as a guide.



## EPDM cellular rubber white

material properties	data	standard
material specification	RE 42/2A2	ASTM D 1056
cellular structure	closed	
curing agent	peroxide	
colour	white / beige	
temperature range	-40°C / +95°C	
temperature intermittent	+130°C	
density	120 Kg/m <sup>3</sup> (+/- 10)	
hardness Shore 00 (*)	40 (+/- 5)	ASTM D 2240
hardness Shore A (**)	ca. 10 - 15	
thermal conductivity	0,0501 Wm-1K-1	ASTM C 518-04
linear shrinkage after 22 hours @ 70 °C	max. 5%	
elongation	min. 150%	ASTM D 412
tensile strength	4,5 kg/cm <sup>2</sup> (450 kPa)	ASTM D 412
tear resistance	2,8 kg/cm (0,28 kN/m)	ASTM D 624
compression strength (at 25%)	0,35 kg/cm <sup>2</sup> (35 kPa)	ASTM 1056/85
compression strength (at 50%)	0,7 kg/cm <sup>2</sup> (70 kPa)	ASTM 1056/85
compression set 25% @ 22 hours	40%	ASTM D 395
compression set (30 mm) 25% @ 22 hours	20%	
fire classification	O.K.	FMVSS 302 - FIAT 50433
water absorption	2%	ASTM D 1056

### Additional information:

(\*) The hardness of the cellular rubber materials is measured according to the Shore 00 standard.

(\*\*) The mentioned data according to the Shore A specifications is only mentioned as a guide.

## CR (Neoprene) cellular rubber

material properties	data	standard
material specification	SCE 42-2C2 / SBE 42-2B2	ASTM D 1056
cellular structure	closed	
curing agent	peroxide	
colour	black	
temperature range	-40°C / +120°C	ASTM D 1056
density	150 Kg/m <sup>3</sup> (+/- 25)	ISO 845-88 / ASTM D 3575
hardness Shore 00 (*)	50 (+/- 5)	ASTM D 2240
hardness Shore A (**)	ca. 10 - 15	
thermal conductivity	0,0384 Wm-1K-1	ASTM C 518-04
linear shrinkage after 168 hours @ 70 °C	max. 4%	ASTM D 1204
elongation	min. 250%	ASTM D 412
tensile strength	11,50 kg/cm <sup>2</sup> (1150 kPa)	ASTM D 412
tear resistance	4,3 kg/cm (0,43 kN/m)	ASTM D 624
compression strength (at 25%)	0,40 kg/cm <sup>2</sup> (40 kPa)	ASTM 1056/85
compression set 50% @ 22 hours	25%	ASTM D 395
water absorption	2%	ASTM D 1056
immersion in oil IRM 903 (22 hours at 70°C)	-18.5%	ASTM D 471/98
extract test in solvents (cyclohexane acetone)	32.7%	VDA 675 125/92
aging resistant (air+UV)	good	
fire test (30 mm material)	O.K.	EN ISO 11195-2/05
fire classification	O.K. : HF1	UL 94 - HF1 van 2 t/m 8 mm
fire classification	O.K. : V0	UL 94 - VO van 10 t/m 40 mm

### Additional information:

(\*) The hardness of the cellular rubber materials is measured according to the Shore 00 standard.

(\*\*) The mentioned data according to the Shore A specifications is only mentioned as a guide.

## NBR (Nitrile) cellular rubber

material properties	data	standard
material specification	SBE 42-43 / 2B2-2B3	ASTM D 1056
cellular structure	closed	
curing agent	peroxide	
colour	black	
temperature range	-40°C / +100°C	ASTM D 1056
density	195 Kg/m <sup>3</sup> (+/- 25)	ISO 845-88 / ASTM D 3575
hardness Shore 00 (*)	55 (+/- 5)	ASTM D 2240
hardness Shore A (**)	ca. 10 - 15	
linear shrinkage after 168 hours @ 70 °C	max. 4%	ASTM D 1204
elongation	min. 220%	ASTM D 412
tensile strength	13 kg/cm <sup>2</sup> (1300 kPa)	ASTM D 412
tear resistance	4,2 kg/cm (0,42 kN/m)	ASTM D 624
compression strength (at 25%)	0,65 kg/cm <sup>2</sup> (65 kPa)	ASTM 1056/85
compression set 50% @ 22 hours	15%	ASTM D 395
water absorption	2%	ASTM D 1056
immersion in oil 3 (22 hours @70 °C)	17,0%	ASTM D 471/98
aging resistant (air+UV)	good	
fire classification	O.K. : HF1	UL 94 - HF1

### Additional information:

(\*) The hardness of the cellular rubber materials is measured according to the Shore 00 standard.

(\*\*) The mentioned data according to the Shore A specifications is only mentioned as a guide.

## Silicone foam TYPE 522 - white

material properties	data	standard
cellular structure	closed	
curing agent	peroxide	
colour	white / crème	
temperature range	-70°C / +200°C	
temperature intermittent	+260°C	
density (*)	250 Kg/m <sup>3</sup> (+/- 40)	
hardness Shore 00 (**)	55 (+/- 5)	ASTM D 2240
hardness Shore A (***)	ca. 10	
thermal conductivity	6,4 x 10 <sup>-2</sup> Wm <sup>-1</sup> K <sup>-1</sup>	ASTM C 518
compression strength (at 40%) (****)	90 kPa (+/- 40)	ASTM 1056/2000
elongation	min. 150%	ASTM D 412
tensile strength	min. 0,75 N/mm <sup>2</sup>	ASTM D 412
compression set 22 hours	max. 15%	
resistance to radiation (as expected)	min. 10+5 GRAYS (10+7 RADS) As expected	
fire classification	O.K.	FMVSS 302 (SE) - HBF (UL94)

(\*) The density is measured on a 25mm diameter cord.

(\*\*) The hardness of the cellular rubber materials is measured according to the Shore 00 standard.

(\*\*\*) The mentioned data according to the Shore A specifications is only mentioned as a guide.

(\*\*\*\*) The compression strength is measured on material 25 mm thick.

## Polyether foam sheet SG 25 - grey

material properties	data	standard
material	Polyurethane foam	DR 7930 / T2437
cellular structure	open	
colour	grey	
temperature range	25 kg/m <sup>3</sup>	
net density	22 kg/m <sup>3</sup>	
compression stress	3,7 kPa (0,0037 N/mm <sup>2</sup> )	ISO 3386 (40%) / DIN 53577
tensile strength	120 kPa (0,12 N/mm <sup>2</sup> )	ISO 1798
elongation at break	200%	ISO 1798
compression set 75%	4%	ISO 1856/A (22 hours at 70 °C)
temperature range (constant)	-10°C / +70°C	

## Polyether foam sheet SG 25 - blue

material properties	data	standard
material	polyurethane foam	DR 9030 / T3545
cellular structure	Open	
colour	Light blue	
gross (spatial) density	35 kg/m <sup>3</sup>	
net density	33 kg/m <sup>3</sup>	
compression stress	4,5 kPa (0,0045 N/mm <sup>2</sup> )	ISO 3386 (40%) / DIN 53577
tensile strength	110 kPa (0,11 N/mm <sup>2</sup> )	ISO 1798
elongation at break	150%	ISO 1798
compression set 75%	5%	ISO 1856/A (22 hours at 70 °C)
temperature range (constant)	-10°C / +70°C	