CELLULAR RUBBER

Cellular rubber made by KÖPP is the ideal material for sealing, insulating, isolating, damping and rattle prevention. That is why this cost-effective material is used successfully throughout all industries. KOEPPcell® cellular rubber can be processed in many different ways. For example, by punching, coating, waterjet cutting, kiss-cutting, milling, etc. The material can be supplied in blocks, sheets or rolls. It is also available in a self-adhesive version.

Technical data

- Outstanding sealing
- Low thermal conductivity value (≤ W 0.1 W/mK)
- High compressibility
- Good insulating properties
- Low water absorption
- Flexible processing options
- Can be sulphur-cured or peroxide-cured
- High resistance to temperature and ageing (EPDM)

- High temperature resistance
- Highly flame-resistant and oil-resistant (CR/NBR)
- High elasticity (NR)
- Economical, as it comes straight from the manufacturer

Materials

- EPDM (Ethylene propylene diene monomer rubber – Allrounder)
- EPDM SC-W, 1000, 2000 (semi-open cell)
- HT (high temperature resistant)
- HFFR (halogen-free & self-extinguishing)
- perox (sulphur free combination of different elastomers)
- blend
- NR (Natural rubber – very elastic)
- CR (Chloroprene rubber – self-extinguisihing, medium resistant)
- NBR (Nitrile butadiene rubber – oil-resistant)

Areas of application:





Cellular Rubber · Cellular Rubber · Cellular Rubber · Cellular Rubber · Cellular Rubber · Cellular Rubber · Cellular Rubber · Cellular Rubber · Cellular Rubber

KÖPP
experts in foam

Experts in Foam


Headquarter (Aachen, Germany)


Production site in Bovenden (Germany)


Production site in Arinis (Romania)


Joint Venture (India)


KÖPP Locations worldwide

Founded in 1938 as a trading company, KÖPP is today the specialist for the production of cellular materials, such as polyethylene and cellular rubber. With extraordinary emphasis on quality, a high level of competence and far-reaching service orientation since the 1980s, KÖPP has grown into a company with business contacts and customers all over Europe and the world. Today we produce at two locations in Germany, as well as at one production site in Romania and a joint venture in India.

Our customers benefit from more than 80 years of experience in production and trading as well as the expertise of more than 350 employees.



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- **Production site Bovenden**
  Göttinger Straße 44 | 37120 Bovenden | Germany
- **SC KOEPP ROMANIA S.R.L.**
  Arinis, Maramures | Romania
- **ROOP KOEPP FOAM Technologies Pvt. Ltd.**
  Manesar, Gurgaon | India

Your solutions in foam

KOEPP-26-001

MATERIAL OVERVIEW – CELLULAR RUBBER

KOEPPcell®

CELLULAR RUBBER
ZELLKAUTSCHUK

MATERIAL OVERVIEW



KÖPP
experts in foam



Allrounder

EPDM-SUW
Block size:
2,000 x 1,000 x 55 mm
2,030 x 1,370 x 55 mm
Application temperature:
-40 °C to +105 °C (+120 °C)
Density: 80 ± 15 kg/m³
Compression deflection:
30 ± 15 kPa (at 25 %),
100 ± 25 kPa (at 50 %)
Weather resistance: very good
Fire behaviour: FMVSS 302

Allrounder

EPDM-W
Block size:
2,000 x 1,000 x 55 mm
2,030 x 1,370 x 55 mm
Application temperature:
-40 °C to +105 °C (+120 °C)
Density: 100 ± 20 kg/m³
Compression deflection:
35 ± 15 kPa (at 25 %),
95 ± 25 kPa (at 50 %)
Weather resistance: very good
Fire behaviour: FMVSS 302

Allrounder

EPDM-L
Block size:
2,000 x 1,000 x 50/70 mm
2,030 x 1,370 x 50/70 mm
Application temperature:
-40 °C to +100 °C (+120 °C)
Density: 130 ± 20 kg/m³
Compression deflection:
35 ± 15 kPa (at 25 %),
120 ± 40 kPa (at 50 %)
Weather resistance: very good
Fire behaviour: FMVSS 302

Allrounder

EPDM-S
Block size:
2,000 x 1,000 x 50 mm
2,030 x 1,370 x 50 mm
Application temperature:
-50 °C to +110 °C (+120 °C)
Density: 175 ± 25 kg/m³
Compression deflection:
50 ± 15 kPa (at 25 %),
120 ± 40 kPa (at 50 %)
Weather resistance: very good
Fire behaviour: FMVSS 302

Allrounder

EPDM-65
Block size:
2,000 x 1,000 x 60 mm
Application temperature:
-50 °C to +100 °C (+110 °C)
Density: 65 ± 15 kg/m³
Compression deflection:
40 ± 15 kPa (at 25 %),
100 ± 25 kPa (at 50 %)
Weather resistance: very good
Fire behaviour: FMVSS 302

Allrounder

EPDM-i
Block size:
2,000 x 1,000 x 75 mm
Application temperature:
-40 °C to +100 °C
Density: 100 ± 20 kg/m³
Compression deflection:
45 ± 15 kPa (at 25 %),
110 ± 25 kPa (at 50 %)
Weather resistance: very good
Fire behaviour: FMVSS 302

Allrounder

EPDM-M
Block size:
2,000 x 1,000 x 77 mm
Application temperature:
-50 °C to +100 °C (+120 °C)
Density: 110 ±a 20 kg/m³
Compression deflection:
50 ± 15 kPa (at 25 %),
125 ± 40 kPa (at 50 %)
Weather resistance: very good
Fire behaviour: FMVSS 302

Allrounder

EPDM-H
Block size:
2,000 x 1,000 x 70 mm
Application temperature:
-50 °C to +100 °C (+120 °C)
Density: 130 ± 20 kg/m³
Compression deflection:
70 ± 15 kPa (at 25 %),
160 ± 40 kPa (at 50 %)
Weather resistance: very good
Fire behaviour: FMVSS 302

sulfur free

EPDM-SUW *perox*
Block size:
2,000 x 1,000 x 55 mm
Application temperature:
-40 °C to +105 °C (+120 °C)
Density: 80 ± 15 kg/m³
Compression deflection:
30 ± 15 kPa (at 25 %),
100 ± 25 kPa (at 50 %)
Weather resistance: very good
Fire behaviour: FMVSS 302

sulfur free

EPDM-W *perox*
Block size:
2,000 x 1,000 x 50 mm
Application temperature:
-40 °C to +105 °C (+120 °C)
Density: 100 ± 20 kg/m³
Compression deflection:
35 ± 15 kPa (at 25 %),
95 ± 25 kPa (at 50 %)
Weather resistance: very good
Fire behaviour: FMVSS 302

sulfur free

EPDM-L *perox*
Block size:
2,000 x 1,000 x 50 mm
Application temperature:
-40 °C to +100 °C (+120 °C)
Density: 120 ± 20 kg/m³
Compression deflection:
35 ± 15 kPa (at 25 %),
120 ± 40 kPa (at 50 %)
Weather resistance: very good
Fire behaviour: FMVSS 302

sulfur free

EPDM-S *perox*
Block size:
2,000 x 1,000 x 50 mm
Application temperature:
-50 °C to +110 °C (+120 °C)
Density: 165 ± 20 kg/m³
Compression deflection:
50 ± 15 kPa (at 25 %),
120 ± 40 kPa (at 50 %)
Weather resistance: very good
Fire behaviour: FMVSS 302

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high temperature resistant

EPDM-SUW HT
Block size:
2,000 x 1,000 x 55 mm
Application temperature:
-50 °C to +130 °C (+145 °C)
Density: 80 ± 15 kg/m³
Compression deflection:
30 ± 15 kPa (at 25 %),
100 ± 25 kPa (at 50 %)
Weather resistance: very good
Fire behaviour: FMVSS 302

high temperature resistant

EPDM-S HT
Block size:
2,000 x 1,000 x 50 mm
Application temperature:
-50 °C to +140 °C (150 °C)
Density: 175 ± 25 kg/m³
Compression deflection:
50 ± 15 kPa (at 25 %),
120 ± 40 kPa (at 50 %)
Weather resistance: very good
Fire behaviour: FMVSS 302

firm

EPDM-W F
Block size:
2,000 x 1,000 x 70 mm
Application temperature:
-40 °C to +105 °C (+120 °C)
Density: 110 ± 20 kg/m³
Compression deflection:
50 ± 15 kPa (at 25 %),
130 ± 30 kPa (at 50 %)
Weather resistance: very good
Fire behaviour: FMVSS 302

firm

EPDM-S F
Block size:
2,000 x 1,000 x 50 mm
Application temperature:
-50 °C to +110 °C (+120 °C)
Density: 240 ± 20 kg/m³
Compression deflection:
120 ± 30 kPa (at 25 %),
300 ± 40 kPa (at 50 %)
Weather resistance: very good
Fire behaviour: FMVSS 302

semi-open cell

EPDM-SC-W
Block size:
2,000 x 1,000 x 50 mm
Application temperature:
-40 °C to +100 °C (+120 °C)
Density: 100 ± 15 kg/m³
Compression deflection:
2 ± 1 kPa (at 25 %),
3,5 ± 1,5 kPa (at 50 %)
Weather resistance: very good
Fire behaviour: FMVSS 302

semi-open cell

EPDM-1000
Block size:
2,000 x 1,000 x 82 mm
Application temperature:
-40 °C to +110 °C
Density: 95 ± 20 kg/m³
Compression deflection:
≤ 4 kPa (at 25%),
≤ 7 kPa (at 50%)
Weather resistance: very good
Fire behaviour: FMVSS 302

semi-open cell

EPDM-2070
20 m no joints
Block size:
2,000 x 1,000 x 62 mm
Application temperature:
-45 °C to +120 °C
Density: 70 ± 15 kg/m³
Compression deflection:
≤ 3 kPa (at 25%),
≤ 4 kPa (at 50%)
Weather resistance: very good
Fire behaviour: FMVSS 302

semi-open cell

EPDM-2100
20 m no joints
Block size:
2,000 x 1,000 x 56 mm
Application temperature:
-45 °C to +120 °C
Density: 100 ± 15 kg/m³
Compression deflection:
≤ 4 kPa (at 25%),
≤ 5 kPa (at 50%)
Weather resistance: very good
Fire behaviour: FMVSS 302

semi-open cell

EPDM-2130
20 m no joints
Block size:
1,000 x 2,000 x 45 mm
Application temperature:
-45 °C to +120 °C
Density: 130 ± 20 kg/m³
Compression deflection:
≤ 6 kPa (at 25%)
Weather resistance: very good
Fire behaviour: FMVSS 302

Allrounder

EPDM-L (ISCC *)
Block size:
2,000 x 1,000 x 50/70 mm
Application temperature:
-40 °C to 100 °C (120 °C)
Density: 130 ± 20 kg/m³
Compression deflection:
35 ± 15 kPa (at 25 %)
Weather resistance: very good
Fire behaviour: FMVSS 302

* Made with ISCC-certified raw materials

low emission

EPDM-S LE
Block size:
2,000 x 1,000 x 50 mm
Application temperature:
-50 °C to +110 °C
Density: 175 ± 25 kg/m³
Compression deflection:
60 ± 15 kPa (at 25 %),
140 ± 40 kPa (at 50 %)
Weather resistance: very good
Fire behaviour: FMVSS 302

EPDM-X
Customized cellular rubber according to your specification!

LET´S TALK ABOUT IT!

blend

EPDM/SBR S
Block size:
2,000 x 1,000 x 50 mm
Application temperature:
-40 °C to +90 °C (+110 °C)
Density: 175 ± 25 kg/m³
Compression deflection:
70 ± 20 kPa (at 25 %),
175 ± 45 kPa (at 50 %)
Weather resistance: very good
Fire behaviour: FMVSS 302

self-extinguishing sulfur free

CR-M
Block size:
2,000 x 1,000 x 50 mm
Application temperature:
-30 °C to +100 °C (+115 °C)
Density: 130 ± 20 kg/m³
Compression deflection:
55 ± 15 kPa (at 25 %)
Weather resistance: limited
Fire behaviour:
UL94 V-0, EN 45545

self-extinguishing sulfur free

CR-F *firm*
Block size:
2,000 x 1,000 x 50 mm
Application temperature:
-30 °C to +100 °C (+115 °C)
Density: 150 ± 20 kg/m³
Compression deflection:
80 ± 20 kPa (at 25 %)
Weather resistance: limited
Fire behaviour: UL94 V-0

self-extinguishing sulfur free

CR-H
Block size:
1,850 x 1,000 x 50 mm
Application temperature:
-30 °C to +100 °C (+115 °C)
Density: 160 ± 20 kg/m³
Compression deflection:
75 ± 25 kPa (at 25 %)
Weather resistance: limited
Fire behaviour: UL94 V-0

blend

EPDM/CR-L
Block size:
2,000 x 1,000 x 70 mm
Application temperature:
-40 °C to +100 °C (+120 °C)
Density: 120 ± 20 kg/m³
Compression deflection:
40 ± 10 kPa (at 25 %),
120 ± 40 kPa (at 50 %)
Weather resistance: very good
Fire behaviour: UL94 HBF

blend

EPDM/CR-S
Block size:
2,000 x 1,000 x 50 mm
Application temperature:
-40 °C to +100 °C (+120 °C)
Density: 175 ± 25 kg/m³
Compression deflection:
45 ± 15 kPa (at 25 %),
120 ± 40 kPa (at 50 %)
Weather resistance: very good
Fire behaviour: UL94 HB

self-extinguishing halogen-free

EPDM-W HFFR
Block size:
2,000 x 1,000 x 50 mm
Application temperature:
-40 °C to +100 °C (+120 °C)
Density: 100 ± 20 kg/m³
Compression deflection:
35 ± 15 kPa (at 25 %),
120 ± 40 kPa (at 50 %)
Weather resistance: very good
Fire behaviour: FMVSS 302 /
self-extinguishing

self-extinguishing halogen-free

EPDM-S HFFR
Block size:
2,000 x 1,000 x 50 mm
Application temperature:
-50 °C to +110 °C (+120 °C)
Density: 175 ± 25 kg/m³
Compression deflection:
50 ± 15 kPa (at 25 %),
120 ± 40 kPa (at 50 %)
Weather resistance: very good
Fire behaviour: FMVSS 302 /
self-extinguishing

oil resistant

NBR-L
Block size:
2,000 x 1,000 x 50 mm
Application temperature:
-40 °C to 90 °C (110 °C)
Density: 130 ± 20 kg/m³
Compression deflection:
50 ± 15 kPa (at 25 %)
Oil resistance: good
Fire behaviour: FMVSS 302

highly elastic

NR-L *medium*
Block size:
2,000 x 1,000 x 50 mm
Application temperature:
-30 °C to +70 °C (+90 °C)
Density: 165 ± 35 kg/m³
Compression deflection:
50 ± 15 kPa (at 25 %),
1360 ± 30 kPa (at 50 %)
Weather resistance: limited
Fire behaviour: FMVSS 302

highly elastic

NR-S *firm*
Block size:
2,000 x 1,000 x 50 mm
Application temperature:
-30 °C to +80 °C (+90 °C)
Density: 190 ± 20 kg/m³
Compression deflection:
75 ± 15 kPa (at 25 %),
140 ± 20 kPa (at 50 %)
Weather resistance: limited
Fire behaviour: FMVSS 302

highly elastic

NR-S *extra firm*
Block size:
2,000 x 1,000 x 50 mm
Application temperature:
-30 °C to +80 °C (+90 °C)
Density: 240 ± 20 kg/m³
Compression deflection:
80 ± 20 kPa (at 25 %),
195 ± 25 kPa (at 50 %)
Weather resistance: limited
Fire behaviour: FMVSS 302