

Typische Eigenschaften von Kautschuk-Elastomeren - Typical properties of Rubber elastomer		EPDM Ethylen-Propylen-Dien-Kautschuk - Ethylene-propylene diene rubber	NR Natur-Kautschuk - Natural rubber	CR Chloropren-Kautschuk - Chloroprene rubber
Härtebereich Shore 00 - Hardness Range Shore 00		20-40	45-62	40-50
Weiterreißwiderstand - Tear Strength/Tear Resistance	Zugfestigkeit - Tensile Strength	●	●	●
	Bruchdehnung - Elongation at Break	●	●	●
	Rückprallelastizität - Rebound Resilience	●	●	●
	Weiterreißwiderstand - Tear Resistance	●	●	●
	Abriebwiderstand - Abrasion Resistance	●	●	●
	Widerstand gegen bleibende Verformung - Resistance to permanent Deformation	bei hohen Temperaturen - at high Temperatures	●	●
bei tiefen Temperaturen - at low Temperatures		●	●	●
Thermisches Verhalten - Thermal Behaviour	Kälteflexibel bis C° - Flexible up to C° at low Temperatures	(-)30°C - (-)50°C	(-)30°C	(-)30°C - (-)40°C
	Max. Dauereinsatz-Temperatur in C° - Max. Continuous Operation-Temperature in C°	100°C - 140°C	70°C - 80°C	110°C
	Brandverhalten - Fire Behavior	●	●	●
Beständigkeit gegen - Resistance to	Benzin - Gas	●	●	●
	Mineralöl (bei 100°C) - Mineral Oil (at 100°C)	●	●	●
	Säuren (25%ige Schwefelsäure bei 50°C) - Acids (25% Sulphuric Acid at 50°C)	●	●	●
	Laugen (50%ige Natronlauge bei 50°C) - Alkaline Solutions (50%) Caustic Soda at 50°C	●	●	●
	Wasser (bei 100°C) - Water (at 100°C)	●	●	●
	Witterung und Ozon - Weather and Ozone	●	●	●
	Luftdurchlässigkeit - Air Permeability	●	●	●

Beurteilung Rating ● Empfohlener Einsatz recommended application ● bedingt einsetzbar limited suitable ○ nicht einsetzbar not suitable



discover the difference!

Produktinformationen
Product information

www.koepp.de

W. KÖPP GmbH & Co. KG
Hergelsbendenstraße 20 • 52080 Aachen • Germany
Tel.: +49 (0) 241 16605-0 • E-Mail: info@koepp.de

SC KOEPP ROMANIA S.R.L.
Arinis, Maramures • Romania

ZWEIGWERK BOVENDEN
Bovenden • Germany
Tel.: +49 (0) 551 820490

ROOP KOEPP Foam Technologies Pvt. Ltd.
Manesar, Gurgaon • India



Diese Darstellung kann das Eigenschaftsbild der einzelnen Kautschuk-Vulkanisate nur richtungsweisend/richtlinienartig wiedergeben. Rückschlüsse auf konkrete Mischungen können nur bedingt gezogen werden, da durch die Einstellung einer bestimmten Eigenschaft in einer Rezeptur (z.B. der Härte) eine Reihe anderer Merkmale beeinflusst werden kann.

This illustration can only reflect the property profile of the individual rubber vulcanizates in a directional/guidelines manner. Conclusions on actual compounds can only be drawn to a limited extent, since the setting of a certain property in a formulation (e.g. hardness) can have an unfavorable effect on a number of other properties.

Qualität / Handelsname Quality / Trade-Name Farbe / Colour Rohdichte / Density Druckspannung / Compression deflection Druckverformungsrest nach 24 Std. / Compression set after 24h Wasseraufnahme / Water absorption Bruchdehnung / Elongation at break Zugfestigkeit / Tensile strength Linearer Schwund / Linear shrinkage Gebrauchstemperatur / Application temperature Shorehärte / Shore hardness Ozonbeständigkeit (Rissbildstufe) / Ozone resistance (Resistance to cracking) ASTM Klassifizierung / ASTM Classification FMVSS Klassifizierung / FMVSS Classification Brandverhalten / Fire Behaviour REACH Konformität / REACH Compliance RoHS Konformität / RoHS Compliance Blockgröße / Block size Haut / Skin

EPDM	EPDM-SUW		EPDM-SUW	80 ± 15 kg/m³	(25%) 30 ± 15 kPa (50%) 100 ± 25 kPa	23°C, 50%: ≤ 30% 40°C, 50%: ≤ 50%	≤ 5%	≥ 125%	≥ 150 kPa	≤ 5%	-40°C +105°C +120°C	20 ± 6 Shore 00	[0]	2A1 A2 B3 C2 F1 M P	pass 5 mm	ja yes	ja yes	L: 2.000 x B: 1.000 x H: 55 mm 78 3/4" x 39 3/8" x 2 1/6"	2x
	EPDM-W		EPDM-W	100 ± 20 kg/m³	(25%) 35 ± 15 kPa (50%) 95 ± 25 kPa	23°C, 50%: ≤ 20% 40°C, 50%: ≤ 40%	≤ 5%	≥ 125%	≥ 200 kPa	≤ 5%	-40°C +105°C +120°C	25 ± 6 Shore 00	[0]	2A1 A2 B3 C2 F1 M P	pass 4 mm	ja yes	ja yes	L: 2.000 x B: 1.000 x H: 55 mm 78 3/4" x 39 3/8" x 2 1/6"	2x
	EPDM-L		EPDM-L	130 ± 20 kg/m³	(25%) 35 ± 15 kPa (50%) 120 ± 40 kPa	23°C, 50%: ≤ 25% 40°C, 50%: ≤ 50%	≤ 5%	≥ 150%	≥ 350 kPa	≤ 5%	-40°C +100°C +120°C	35 ± 6 Shore 00	[0]	2A2 A2 B2 C2 F1 M P	pass 3 mm	ja yes	ja yes	L: 2.000 x B: 1.000 x H: 50/70 mm 78 3/4" x 39 3/8" x 2/2 3/4"	2x
	EPDM-S		EPDM-S	175 ± 25 kg/m³	(25%) 50 ± 15 kPa (50%) 120 ± 40 kPa	23°C, 50%: ≤ 25% 40°C, 50%: ≤ 50%	≤ 5%	≥ 150%	≥ 400 kPa	≤ 5%	-50°C +110°C +120°C	40 ± 8 Shore 00	[0]	2A2 A2 B2 C2 F1 M P	pass 3 mm	ja yes	ja yes	L: 2.000 x B: 1.000 x H: 50 mm 78 3/4" x 39 3/8" x 2"	2x
	firm fest	EPDM-W-F	EPDM-W-F	110 ± 20 kg/m³	(25%) 50 ± 15 kPa (50%) 130 ± 30 kPa	23°C, 50%: ≤ 25% 40°C, 50%: ≤ 50%	≤ 4%	≥ 100%	≥ 300 kPa	≤ 5%	-40°C +105°C +120°C	40 ± 5 Shore 00	[0]	2A2 A2 B3 C2 F1 M P	pass 4 mm	ja yes	ja yes	L: 2.000 x B: 1.000 x H: 70 mm 78 3/4" x 39 3/8" x 2 3/4"	2x
		EPDM-S-F	EPDM-S-F	240 ± 20 kg/m³	(25%) 120 ± 30 kPa (50%) 300 ± 40 kPa	23°C, 50%: ≤ 15% 40°C, 50%: ≤ 30%	≤ 3%	≥ 110%	≥ 650 kPa	≤ 3%	-50°C +110°C +120°C	65 ± 5 Shore 00	[0]	2A4 A2 B2 C2 F1 M P	pass 2 mm	ja yes	ja yes	L: 2.000 x B: 1.000 x H: 50 mm 78 3/4" x 39 3/8" x 2"	2x
	High temperature resistant Hochtempera- turbeständig	EPDM-L-HT	EPDM-L-HT	130 ± 20 kg/m³	(25%) 35 ± 15 kPa (50%) 120 ± 40 kPa	23°C, 50%: ≤ 25% 40°C, 50%: ≤ 50%	≤ 5%	≥ 150%	≥ 350 kPa	≤ 5%	-50°C +135°C +150°C	35 ± 6 Shore 00	[0]	2A2 A2 B2 C2 F1 M P	pass 3 mm	ja yes	ja yes	L: 2.000 x B: 1.000 x H: 50 mm 78 3/4" x 39 3/8" x 2"	2x
		EPDM-S-HT	EPDM-S-HT	175 ± 25 kg/m³	(25%) 50 ± 15 kPa (50%) 120 ± 40 kPa	23°C, 50%: ≤ 25% 40°C, 50%: ≤ 50%	≤ 5%	≥ 200%	≥ 400 kPa	≤ 5%	-50°C +140°C +150°C	40 ± 8 Shore 00	[0]	2A2 A2 B2 C2 F1 M P	pass 3 mm	ja yes	ja yes	L: 2.000 x B: 1.000 x H: 50 mm 78 3/4" x 39 3/8" x 2"	2x
	sulfur free schwefelfrei	EPDM-SUW/Perox	EPDM-SUW/Perox	80 ± 15 kg/m³	(25%) 30 ± 15 kPa (50%) 100 ± 25 kPa	23°C, 50%: ≤ 30% 40°C, 50%: ≤ 50%	≤ 5%	≥ 150%	≥ 200 kPa	≤ 5%	-40°C +105°C +120°C	20 ± 6 Shore 00	[0]	2A1 A2 B3 C2 F1 M P	pass 5 mm	ja yes	ja yes	L: 2.000 x B: 1.000 x H: 55 mm 78 3/4" x 39 3/8" x 2 1/6"	2x
		EPDM-W/Perox	EPDM-W/Perox	100 ± 20 kg/m³	(25%) 35 ± 15 kPa (50%) 95 ± 25 kPa	23°C, 50%: ≤ 20% 40°C, 50%: ≤ 40%	≤ 5%	≥ 150%	≥ 250 kPa	≤ 5%	-40°C +105°C +120°C	25 ± 6 Shore 00	[0]	2A1 A2 B3 C2 F1 M P	pass 5 mm	ja yes	ja yes	L: 2.000 x B: 1.000 x H: 50 mm 78 3/4" x 39 3/8" x 2"	2x
		EPDM-L/Perox	EPDM-L/Perox	120 ± 20 kg/m³	(25%) 35 ± 15 kPa (50%) 120 ± 40 kPa	23°C, 50%: ≤ 25% 40°C, 50%: ≤ 50%	≤ 5%	≥ 200%	≥ 300 kPa	≤ 5%	-40°C +100°C +120°C	35 ± 6 Shore 00	[0]	2A1/2 A2 B2 C2 F1 M P	pass 4 mm	ja yes	ja yes	L: 2.000 x B: 1.000 x H: 50 mm 78 3/4" x 39 3/8" x 2"	2x
		EPDM-S/Perox	EPDM-S/Perox	165 ± 20 kg/m³	(25%) 50 ± 15 kPa (50%) 120 ± 40 kPa	23°C, 50%: ≤ 25% 40°C, 50%: ≤ 50%	≤ 5%	≥ 200%	≥ 400 kPa	≤ 5%	-50°C +110°C +120°C	40 ± 8 Shore 00	[0]	2A2 A2 B2 C2 F1 M P	pass 3 mm	ja yes	ja yes	L: 2.000 x B: 1.000 x H: 50 mm 78 3/4" x 39 3/8" x 2"	2x
	Blend	EPDM-PE	EPDM-PE	80 ± 15 kg/m³	(25%) 35 ± 15 kPa (50%) 105 ± 25 kPa	23°C, 50%: ≤ 50% 40°C, 50%: ≤ 80%	≤ 5%	≥ 200%	≥ 200 kPa	≤ 5%	-30°C +100°C +105°C	40 ± 6 Shore 00	[0]	2A1 A2 B3 C1 F1	pass 6 mm	ja yes	ja yes	L: 2.000 x B: 1.000 x H: 110 mm 78 3/4" x 39 3/8" x 4 1/3"	2x
		EPDM/SBR-S	EPDM/SBR-S	175 ± 25 kg/m³	(25%) 70 ± 20 kPa (50%) 175 ± 45 kPa	23°C, 50%: ≤ 50% 40°C, 50%: ≤ 75%	≤ 3%	≥ 80%	≥ 400 kPa	≤ 5%	-40°C +90°C +110°C	60 ± 10 Shore 00	[0]	2A3/4 A2 B2	pass 2 mm	ja yes	ja yes	L: 2.000 x B: 1.000 x H: 50 mm 78 3/4" x 39 3/8" x 2"	2x
		EPDM-CR-L	EPDM-CR-L	120 ± 20 kg/m³	(25%) 40 ± 10 kPa (50%) 120 ± 40 kPa	23°C, 50%: ≤ 25% 40°C, 50%: ≤ 40%	≤ 5%	≥ 130%	≥ 250 kPa	≤ 5%	-40°C +100°C +120°C	35 ± 6 Shore 00	[0]	2A1/2 A2 B2 C2 F1 M P	pass 2,5 mm	ja yes	ja yes	L: 2.000 x B: 1.000 x H: 70 mm 78 3/4" x 39 3/8" x 2 3/4"	2x
		EPDM-CR-S	EPDM-CR-S	175 ± 25 kg/m³	(25%) 45 ± 15 kPa (50%) 120 ± 40 kPa	23°C, 50%: ≤ 25% 40°C, 50%: ≤ 40%	≤ 5%	≥ 130%	≥ 400 kPa	≤ 5%	-40°C +100°C +120°C	40 ± 6 Shore 00	[0]	2A1/2 A2 B2 C2 F1 M P	pass 2,5 mm	ja yes	ja yes	L: 2.000 x B: 1.000 x H: 50 mm 78 3/4" x 39 3/8" x 2"	2x
semi-closed gemischtzellig	EPDM-SC-W	EPDM-SC-W	100 ± 15 kg/m³	(25%) 2 ± 1 kPa (50%) 3,5 ± 1,5 kPa Vorkraft/pre force 0,2 N	23°C, 50%: ≤ 3% 40°C, 50%: ≤ 5%	x*	≥ 150%	≥ 100 kPa	≤ 5%	-40°C +100°C +120°C	x*	[0]	2A0 A2 B2 C2 F1 M P	pass 5 mm	ja yes	ja yes	L: 2.000 x B: 1.000 x H: 55 mm 78 3/4" x 39 3/8" x 2 1/6"	1x	
NR	ZK/NR-L mittel		ZK/NR-L medium	160 ± 25 kg/m³	(25%) 50 ± 15 kPa (50%) 130 ± 30 kPa	23°C, 50%: ≤ 20% 40°C, 50%: ≤ 45%	≤ 5%	≥ 150%	≥ 450 kPa	≤ 6%	-30°C +70°C +90°C	45 ± 8 Shore 00	[0]	2 A3 B2 P	pass 7 mm	ja yes	ja yes	L: 2.000 x B: 1.000 x H: 50 mm 78 3/4" x 39 3/8" x 2"	2x
	ZK/NR-S fest		ZK/NR-S firm	190 ± 20 kg/m³	(25%) 75 ± 15 kPa (50%) 140 ± 20 kPa	23°C, 50%: ≤ 25% 40°C, 50%: ≤ 65%	≤ 5%	≥ 160%	≥ 600 kPa	≤ 6%	-30°C +80°C +90°C	48 ± 7 Shore 00	[0]	2 A3/4 B2 P	pass 6 mm	ja yes	ja yes	L: 2.000 x B: 1.000 x H: 50 mm 78 3/4" x 39 3/8" x 2"	2x
	ZK/NR-S extrafest		ZK/NR-S extra firm	240 ± 20 kg/m³	(25%) 80 ± 20 kPa (50%) 195 ± 25 kPa	23°C, 50%: ≤ 15% 40°C, 50%: ≤ 55%	≤ 5%	≥ 150%	≥ 800 kPa	≤ 10%	-30°C +80°C +90°C	62 ± 5 Shore 00	[0]	2 A3/4 B2 P	pass 5 mm	ja yes	ja yes	L: 2.000 x B: 1.000 x H: 50 mm 78 3/4" x 39 3/8" x 2"	2x
CR	ZK/CR-L		ZK/CR-L	160 ± 20 kg/m³	(25%) 50 ± 15 kPa (50%) 125 ± 25 kPa	23°C, 50%: ≤ 55% 40°C, 50%: ≤ 75%	≤ 5%	≥ 170%	≥ 500 kPa	≤ 10%	-30°C +110°C +120°C	40 ± 6 Shore 00	[0]	2 C2 A1 B2 C E1	selbstverlöschend self-extinguishing ab/at 2mm	ja yes	ja yes	L: 2.000 x B: 1.000 x H: 50 mm 78 3/4" x 39 3/8" x 2"	2x
	ZK/CR-S fest		ZK/CR-S firm	200 ± 30 kg/m³	(25%) 80 ± 15 kPa (50%) 145 ± 25 kPa	23°C, 50%: ≤ 50% 40°C, 50%: ≤ 70%	≤ 5%	≥ 200%	≥ 600 kPa	≤ 10%	-40°C +110°C +120°C	50 ± 6 Shore 00	[0]	2 C3 A1 B3 C E1 P	selbstverlöschend self-extinguishing ab/at 2mm	ja yes	ja yes	L: 2.000 x B: 1.000 x H: 50 mm 78 3/4" x 39 3/8" x 2"	2x
	sulfur free schwefelfrei	CR-M	CR-M	130 ± 20 kg/m³	(25%) 55 ± 15 kPa (50%) 140 ± 20 kPa	23°C, 50%: ≤ 50% 40°C, 50%: ≤ 70%	≤ 5%	≥ 100%	≥ 600 kPa	≤ 6%	-30°C +100°C +115°C	50 ± 5 Shore 00	[0]	2 C2 A1 B2 E1 C	selbstverlöschend self-extinguishing ab/at 2mm	ja yes	ja yes	L: 2.000 x B: 1.000 x H: 50 mm 78 3/4" x 39 3/8" x 2"	2x
		CR-F fest	CR-F firm	150 ± 20 kg/m³	(25%) 80 ± 20 kPa (50%) 180 ± 25 kPa	23°C, 50%: ≤ 40% 40°C, 50%: ≤ 70%	≤ 5%	≥ 85%	≥ 600 kPa	≤ 6%	-30°C +100°C +115°C	55 ± 5 Shore 00	[0]	2 C3 A1 B3 E1 P	selbstverlöschend self-extinguishing ab/at 2mm	ja yes	ja yes	L: 2.000 x B: 1.000 x H: 50 mm 78 3/4" x 39 3/8" x 2"	2x

x*= nicht messbar / not measurable

ISO 845

ASTM D-1056

ASTM D-1056

ASTM-1056

ISO 1798

ISO 1798

Ford-WSK-
M2D419-A

ISO 868

ISO 1431-1

ASTM Codex

Regulation (EG)
No 1907/2006

Guideline
2011/65/EU



Zellkautschuk Cellular rubber
KOEPPCELL®