FKM 80.45-01

Material name, short description	FKM
Material name, based on technical standards	Fluorine elastomer
Material description / intended use	Fluoroelastomer with high heat resistance and broad chemical resistance.
Color	brown
Compound code	FKM 80.45-01
Old, but still valid compound code	FKM 80.445-01 / FKM 80.445-08
Crosslinking/curing agent	bisphenol
Remarks	Co-Polymer ASTM code: ASTM D2000 M2HK810 A1-10 B38 EO78 EF31

Mechanical properties

Hardness nominal	80 ±5 Shore A ASTM D 2240
Hardness	78 Shore A ASTM D 2240
Density nominal	2.16 g/cm³ ASTM D 297
Tensile strength	12.9 N/mm² ASTM D 412
Elongation at break	193 % ASTM D 412-C
Compression set	16 % 22 h, 200 °C

Thermal properties

Operating temperature min.*	-20 °C
Operating temperature max.*	200 °C

* Approximate value, dependent on the application

Storage in medium 1

Medium	ASTM Fuel C
Test parameter	70 h, 23 °C
Value change	Hardness: -3 Points Tensile strength: -20 % Elongation at break: +18 % Volume: +3 %

Storage in medium 2

Medium	IRM 101 Oil (ASTM 101)
Test parameter	70 h, 200 °C
Value change	Hardness: -9 Points Tensile strength: -23 % Elongation at break: +31 % Volume: +11 %

Air aging 1

Test parameter	70 h, 250 °C
Value change	Hardness: +4 Points Tensile strength: +3 % Elongation at break: -18 %

Approvals / Compliance

Specific substance statements	PAH Class 2 (AfPS GS 2019:01)