

PERTEC® ST FKM 75.501-02

Sealing Technology Technical Data Sheet

Very suitable for steam applications

General compound description

Material name, short description	FKM
Material name, based on technical standards	Fluorine elastomer
Compound Code	PERTEC® ST FKM 75.501-02
Material description / intended use	Fluoroelastomer with high heat resistance and broad chemical resistance.
Crosslinking agent	peroxid
Color	black
Remarks	High fluorine content

Mechanical properties

Density	1.96 g/cm ³ ± 0.02 ASTM D 297
Hardness	75 Shore A ± 5 ASTM D 2240
Tensile strength	17.3 MPa ASTM D 412
Elongation at break	268 % ASTM D 412
Compression set	19 % ASTM D 395-B2 22 h, 175 °C, 25% deformation
Tear resistance	33 N/mm ASTM D 624-B

Chemical state change

Air aging	
Value change 1	Hardness: +2 Points Tensile strength: +4 % Elongation at break: -12 % Test norm: ASTM D 573 Test parameter: 70 h, 200 °C
Storage in medium	
Value change 1	Medium: Steam ASTM Hardness: -5 Points Volume: +6 % Test norm: ASTM D 471 Test parameter: 168 h, 150 °C
Value change 2	Medium: Steam ASTM Hardness: -8 Points Volume: +9.4 % Weight: +4.5 % Test norm: ASTM D 471 Test parameter: 168 h, 200 °C

Approvals of this compound

ADI free

Proof of PAH and Phtalate of this compound

Phthalate free

Thermal properties

Min. operating temperature	-15 °C
Max. operating temperature	200 °C
TR 10 value	-7 °C ASTM D 1329

Value change 3	Medium: ASTM Fuel C Hardness: -4 Points Volume: +4.8 % Test norm: ASTM D 471 Test parameter: 48 h, 40 °C
Value change 4	Medium: H2SO4 (Sulfuric acid 98%) Hardness: -1.5 Points Volume: +0.65 % Weight: +0.4 % Test norm: ASTM D 471 Test parameter: 168 h, 23 °C
Value change 5	Medium: IRM 903 Oil (ASTM 3) Hardness: -0.5 Points Volume: +2 % Test norm: ASTM D 471 Test parameter: 70 h, 150 °C

