HNBR 70.10-09

Angst+Pfister

Sealing Technology
Technical Data Sheet

General compound description

Material name, short description	HNBR
Material name, based on technical standards	Hydrogenated acrylonytrile butadien rubber
Compound Code	HNBR 70.10-09
Material description / intended use	Elastomer with good resistance against ozone, weathering, aging, hot water and various oils.
Color	yellow

Mechanical properties	
Density	1.33 g/cm³ ± 0.03 ASTM D 297
Hardness	70 Shore A ± 5 ASTM
Tensile strength	12 MPa ASTM D 412-C
Elongation at break	340 % ASTM D 412-C
Compression set	27 % ASTM D 395-B 72 h, -20 °C, 25 % deformation
	15 % ASTM D 395-B 168 h, 125 °C, 25 % deformation

Thermal properties	
Min. operating temperature	-30 °C
Max. operating temperature	+150 °C
Note to operating temperature	approximate value, dependent of the application

Chemical state change	
Air aging	
Value change 1	Hardness: +8 Points Tensile strength: +7 % Elongation at break: -20 % Test norm: ASTM D 573 Test parameter: 168 h, 125 °C
Value change 2	Hardness: +2 Points Tensile strength: +5 % Elongation at break: -2 % Test norm: ASTM D 573 Test parameter: 168 h, 70 °C
Storage in medium	
Value change 1	Medium: IRM 902 Oil (ASTM 2) Hardness: +1 Points Volume: -2 % Test norm: ASTM D 471 Test parameter: 168 h, 100 °C
Value change 2	Medium: ASTM Pentane Volume: +10 % Test norm: ASTM D 573 Test parameter: 70 h, 23 °C
Value change 3	Medium: ASTM Fuel B Volume: +28 % Test norm: ASTM D 471 Test parameter: 168 h, 23 °C
Value change 4	Medium: IRM 903 Oil (ASTM 3) Volume: +5 % Test norm: ASTM D 471 Test parameter: 168 h, 70 °C
Ozone test	
Value change	Concentration: 50 pphm Temperature: 40 °C Duration: 48 h Elongation: 15 % Crack formation level: passed

Approvals of this compound

DVGW EN 549 H3 / C2 / -20..+100 °C

DVGW EN 682 GBL

DVGW VP 406

DVGW

In compliance with **RoHS** and **REACH** directives.