

Aflas® 90-compound 223302 - Technical Data Sheet



1. Introduction

Aflas® 223302 is a Tetrafluoroethylene/Propylene Copolymer (FEPM). Cure system is Peroxide. This material has excellent resistance to acids, steam, hot water, brine, oils, lubricants and sour oil and gas. Resistant to all types of hydraulic fluids, all brake fluids and amine corrosion inhibitors. Popular in oilfield applications.

2. Product Description

Chemical Composition	: Tetrafluoroethylene + Propylene (Peroxide cured) (FEPM)
Physical form	: O-Rings / Vulc-O-Rings / Extrusions / Mouldings
Colour	: Black
Storage stability *	: ± 10 years

* : Following ISO 2230 conditions

3. Physical Properties

Test Method	Norm	Test Values
Hardness	ISO 868	90 ± 5 IRHD
Tensile Strength at break	ISO 37	21 MPa
Elongation at break	ISO 37	184%
Compression Set 25% compression, 24h/175°C, on slab	ISO 815	18%
Heat Ageing 72h/250°C	ISO 188	
Hardness Change		-2°
Tensile Strength Change		-2 MPa
Elongation Change		+45%
Immersion in oil n° 3, 70h/150°	ISO 1817	
Volume Change		+12,5%

4. Temperature Resistance

- -10°+200°C / short time: 250°C
- TR10 (low temp): +2°C

5. Chemical Resistance

ASTM Oil n° 3	: very good
ASTM Fuel C	: unsatisfactory
Acetone	: unsatisfactory
Crude oils	: very good
Kerosin	: very good
Sulphuric acids	: very good
MEK	: unsatisfactory
MTBE	: fair
Water	: very good
Steam, 200°C	: very good

6. Advantages

- Good compression set

7. Other Information on Vulc-O-Rings

- Tolerances standard on cross section to ISO 3302.
- Tolerances on O-Ring inside diameter according ISO 3302 up to diam. 160 mm. Bigger diameters tolerances ±0,5%.
- Smooth surface.
- Can be produced to ±0,05 mm tolerance in cross section.