

Aflas® 80-compound 223301 Vulc-O-Ring - Technical Data Sheet

1. Introduction

Aflas® 223301 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-Copolymer (FEPM)
Physical form :	Vulc-O-Rings / Mouldings / Extrusions
Colour :	Black
Storage stability* :	± 10 years

* : Following ISO 2230 conditions

3. Physical Properties

Test Method	Norm	Test Values
Hardness	ISO 868	80 ± 5 IRHD
Tensile Strength at break	ISO 37	14,9 MPa
Elongation at break	ISO 37	331%
Specific Weight	ISO 2781	1,73
Compression Set 22h/175°C, on slab	ISO 815	54%
Heat Ageing 70h/250°C	ISO 188	
Hardness Change		+0,2%
Tensile Strength Change		+1MPa
Elongation Change		-38%
Immersion in ASTM oil n°3, 70h/150°C	ISO 1817	
Volume Change		+16%
Hardness Change		-11°

4. Temperature Resistance

- -10° to +200°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 section tolerance in extrusions.