Aflas® 70-compound 223001 - Technical Data Sheet

1. Introduction

Aflas® 223001 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	:	O-Rings / Mouldings
Color	:	Black
Storage stability *	:	± 10 years

* : Following ISO 2230 conditions

3. Physical Properties

Test Method	*Norm*	*Test Values*
Hardness	ISO 868	70° ± 5° IRHD
Tensile Strength at break	ISO 37	16 MPa
Elongation at break	ISO 37	250%
Specific Weight	ISO 2781	1,58
Compression Set 70h/200°C, on slab	ISO 815	 40%
Heat Ageing 70h/260°C Hardness Change Tensile Strength Change Elongation Change	ASTM D 573	 -1° -23% +31%
Immersion in steam at 80MPa 100h/288°C Hardness Change Tensile Strength Change Elongation Change		 -1% -38% +45%

4. Temperature Resistance

- -10° to +200°C / short term: +200°C
- TR10 (low temp. resistance): +3°C

5. Chemical Resistance

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

6. Advantages

- Good compression set
- Very good resistance to water, steam and high temperatures.

7. Other Information

FEPM components are combustible and decomposition products generate hydrogen fluoride and fluorinated olefins. Do not expose to temperatures in excess of 310°C.