Seal Maker®
The system for flexible seal production

Material Data Sheet AF101-B85

AFLAS* AF101-black (bisphenol cross linked)

General

AF101-B85 is a Tetrafluoroethylene/Propylene copolymere (TFE/P), commonly referred to as FEPM or AFLAS*. AFLAS* has a very high resistance to hydraulic fluids (incl. Alkyl-Acryl-Phosphate Esters), all break fluids (on glycole, minerale and silicone base), acids, steam and hot water, sour oils/gases (H2S) and heavily formulated oils with amine additives.

Physical properties

Density:	DIN 53479	g/cm³	1,76	±0,03
Hardness at 23°C:	DIN 53505	Shore A	86	±5
100% Modulus:	DIN 53504	N/mm²	10,6	*
Tensile strength:	DIN 53504	N/mm²	12,1	*
Elongation at break:	DIN 53504	%	107,4	*
Tear resistance:	DIN 53515	kN/m	47,6	*
Rebound resiliance:	DIN 53512	%	9,0	*
Compression set, 24h, 70°C, 25%:	DIN 53517	%	21,7	*
Compression set, 24h, 100°C, 25%:	DIN 53517	%	21,0	*
Compression set, 22h, 175°C, 25%:	DIN 53517	%	36,8	*

* mentioned values are subject to a tolerance of +/- 25%

Temperature range: **-15°C to 210°C**

Chemical resistance

Resistant to:	Water up to 90°C, Steam, HFA, HFB Fluids, HFC, HFD Fluids, Mineral Oils, Vegetable Oils, Ozone, Break Fluids, Air up to 200°C
Not Resistant to:	Fuels, Solvents

Main application

Static and dynamic seals (standard and special), wipers, O-rings, flange seals, rotary seals, rubber energizers (preload elements). Applications where high temp. and/or chemical resistance is required, oil and gas industry.

*) AFLAS is a reg. trademark of Asahi Glass Co./Japan.

Analysis and Evaluation

Values mentioned above are based on several tests performed during development and production of the material. Tests have been performed on standard test pieces specified within the relevant standard within the laboratory. Tests performed on any other pieces which are not related to the corresponding standard or made out of any (semi)finished part or any other part deviating in production process, dimension or age of the material from above may result in different values. The data represent our present empirical values and do not disengage the processor or user from his obligation to examine the usage of the material for his specific application.

We reserve the right to update this data sheet from time to time if new empirical values are available. Errors and omissions excepted. V2.0

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