AF1005 Data Sheet U203-GM95

Polyurethane U203-MoS_2 – Grey

General

U203-GM95 is a hydrolysis resistant PU (H-PU) composed of prepolymers based on polyoxytetrametylene glycol (PTMEG) and diphenylmethane diisocyanate (MDI) processed liquid with catalysts and a MoS2 polyol. This special PU-MoS2 compound performs excellent in critical lubrication situations and reduces the stick-slip behaviour.

Physical Properties

Density:	DIN 53479	g/cm3	1,15
Hardness at 20°:	DIN 53505	Shore A	95 +/-2
100% modulus:	DIN 53504	N/mm2	> 11
300% modulus:	DIN 53504	N/mm2	> 18
Tensile strength:	DIN 53504	N/mm2	> 35
Elongation at break:	DIN 53504	%	> 560
Tear strength:	DIN 53515	kN/m	130
Rebound resilience:	DIN 53512	%	49
Abrasion loss:	DIN 53516	mm3	< 50
Compression set:*	DIN 53517	%	26
Hardness at -5°:	DIN 53505	Shore A	95
Hardness at +80°C:	DIN 53505	Shore A	93
Min. service temperature:		°C	-30
Max. service temperature:		°C	105

*Compression set: 25% deflection 22 hours at 70°C, after 3 weeks aging.

Chemical Resistance

Water, sea water	R	Ozone, oxygen (cold)	R
Demineralised water	R	Butyl acetate	U
Steam	U	Nitro acid 58%	U
HFA, HFB fluids	R	Alkali	S
HFC fluids	S	Peanut oil	R
HFD fluids	U	Ethyl alcohol	U
Mineral/vegetable oils	R	Ethylene glycol	U
Silicone oils	R	Glycerine	R
Alcohols, white spirit	S	Methyl alcohol	U
Fuels	S	Petroleum products	R

Key to chemical resistance: R = resistant S = suitable U = unsuitable

Main application

Static and dynamic seals (standard and special), wipers, O-rings, back-up rings, flange seals, rotary seals, low friction and wear, high extrusion resistance, compatibility with water, excellent low temp. characteristics.

Analysis and Evaluation

The properties relate to fundamental values for polyurethane products. Values mentioned above are corresponding to ASTM or DIN standard and have been tested on standardized plates in the laboratory. All immersion tests are made under laboratory conditions.

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