AF1008 Data Sheet U203-D57G

Polyurethane U203+D57 + MoS_2 – Grey

General

U203-D57G 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. The hardness is adjusted at 57 +/-2 Shore D which makes it an excellent extrusion resistant material. This special MoS2 composition performs excellent in critical lubrication situations and reducing the stick-slip behaviour.

Physical Properties

Density:	DIN 53479	g/cm3	1,13
Hardness at 20°:	DIN 53505	Shore D	57 +/-200%
Modulus:	DIN 53504	N/mm2	> 18
Tensile strength:	DIN 53504	N/mm2	> 30
Elongation at break:	DIN 53504	%	> 330
Tear strength:	DIN 53515	KN/m	125
Rebound resilience:	DIN 53512	%	42
Compression set:*	DIN 53517	%	32
Hardness at -5°:	DIN 53505	Shore D	57
Hardness at +80°C:	DIN 53505	Shore D	52
Min. service temperature:		°C	-30
Max. service temperature:		°C	90

*Compression set: 25% deflection 22 hours at 70°C, after 4 weeks aging

Chemical Resistance

Water up to 90°	R	Vegetable oils	R
Sea water	R	Silicone oils	R
Steam	U	Biodegradable oils	R
HFA, HFB fluids	R	Fuels	S
HFC fluids	S	Ozone, oxygen (cold)	R
HFD fluids	U	Air up to 100°	R
Mineral oils	R	Air up to 150°	U

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

Main application

Seals and composite seals (with rubber preload element), wipers, back-up rings, 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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