AF1002 Data Sheet U203-B95-LT

Polyurethane U203 – Blue (Low Temperature)

General

U203-G95 is a hydrolysis resistant PU (H-PU) composed of prepolymers based on polyoxytetrametylene glycol (PTMEG) and diphenylmethane diisocyanate (MDI) processed with catalysts and chain extenders, producing a hardness of 95 +/-2 Shore A with very good physical properties. The resistance to most common hydraulic fluids and oil-water emulsions makes it a very universal material for seal applications.

Physical Properties

Density:	DIN 53479	g/cm3	1,10
Hardness at 20°:	DIN 53505	Shore A	95 +/-2
100% modulus:	DIN 53504	N/mm2	> 12
Tensile strength:	DIN 53504	N/mm2	38
Elongation at break:	DIN 53504	%	520
Tear strength:	DIN 53515	kN/m	158
Rebound resilience:	DIN 53512	%	40
Compression set:*	DIN 53517	%	31
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

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

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 standards and have been tested on standardized plates in the laboratory. All immersion tests are made under laboratory conditions.

Issued February 2021 AFT Fluorotec Technical Department

AFT Fluorotec
Solutions and components in Fluoropolymer Plastics
Phone: +44 (0) 1992 515880
Email: info@fluorotec.com
Website: www.fluorotec.com