

## AF1005a Data Sheet U550-GM95

### Polyurethane U550-GM95 – Dark Red

#### General

U550-GM95 is a MoS<sub>2</sub> filled hydrolysis resistant PU (H-PU) casted polyurethane based on MDI polycarbonate polyol and certain additives. It is recommended in application where reduced friction and poor lubrication is an issued. The material is able to reduce or eliminate the stick-slip effect when it appears.

#### Physical properties

Density	DIN 53479	g/cm <sup>3</sup>	1.16
Hardness at 23°C	DIN 53505	Shore A	95 +/-2
Hardness at +100°C	DIN 53505	Shore A	93 +/-2
100% Modulus	DIN 53504	N/mm <sup>2</sup>	>10
300% Modulus	DIN 53504	N/mm <sup>2</sup>	>30
Tensile strength	DIN 53504	N/mm <sup>2</sup>	>45
Elongation at break	DIN 53504	%	>320
Tear strength	DIN 53515	kN/m	110
Compression set 70°C*	DIN 53517	%	<25
Compression set 1000°C*	DIN 53517	Shore A	<35
Min. service temperature		°C	-30
Max. service temperature		°C	125

\*Compression set: 25% deflexion, 24 hours.

#### Chemical resistance

Water/sea water	R	HFC fluids	S
Demineralised water	R	HFD fluids	U
Steam	U	Fuels, grease	S
Mineral/vegetable oils	R	Silicon oils/ozone/oxygen	R
Concentrated acids	U	Concentrated alcohols and solvents	U
HFA, HFB fluids	R		

Key to chemical resistance: R = Resistant S = Suitable U = Unsuitable

#### Main application

Dynamic applications, mostly used for U-seals, wipers, packings and rotary seals up to 400 bar pressure in standard hydraulics and applications with poor lubrication or even pneumatics. Due to its outstanding hydrolysis resistance it can be used in the most common hydraulic fluids, oil in water emulsions but also water power applications, applications in the mining industry and presses. U550-GM95 shall also be preferred in machinery with rough and worn sliding surfaces.

#### 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.

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All information is based on typical test results performed under specific conditions and limited sample size. This does not represent a legally binding guarantee of certain properties or the suitability for specific applications.

#### AFT Fluorotec

Solutions and components in Fluoropolymer Plastics

**Phone:** +44 (0) 1992 515880  
**Fax:** +44 (0) 1992 554490  
**Email:** info@fluorotec.com  
**Website:** www.fluorotec.com