

AF1004a Data Sheet U530-B95-LT

Polyurethane U530 – Light Blue (Low Temperature)

General

U530-B95-LT is a hydrolysis resistant polyurethane (H-PU) based on polyether-diol and methylene diphenyl diisocyanat (MDI). The hardness is adjusted at 95 +/-2 Shore A. The product is recommended for applications at low temperatures (-50°C), but also in standard hydraulic applications ($\leq 105^{\circ}\text{C}$) as well as hot water applications ($\leq 90^{\circ}\text{C}$).

Physical properties

Density	DIN 53479	g/cm ³	1.11
Hardness at 23°C	DIN 53505	Shore A	95 ± 2
Hardness at 100°C	DIN 53505	Shore A	92 ± 2
100% Modulus	DIN 53504	N/mm ²	>7
300% Modulus	DIN 53504	N/mm	>15
Tensile strength	DIN 53504	N/mm ²	>40
Elongation at break	DIN 53504	%	>450
Tear strength	DIN 53515	kN/m	>100
Compression set 70°C*	DIN 53517	%	<20
Compression set 100°C*	DIN 53517	%	<30
Min. service temperature**		°C	-50
Max. service temperature		°C	105

*Compression set: 25% deflexion, 24 hours.

**Depending on application conditions, lower temperatures are possible. More information upon request.

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 applications

Static and dynamic applications, mostly used for U-seals, wipers and packings up to 400 bar pressure in hydraulics with extreme low temperature conditions as well as in standard hydraulics. Due to its excellent hydrolysis resistance U530-B95-LT can be used in the most common hydraulic fluids and oil in water emulsions as well. It is also appropriate for applications with contact to foodstuff.

Analysis and evaluation

The mentioned properties are only valid for test pieces of the corresponding ISO, DIN and ASTM standards. They cannot be directly related to seals, gaskets and other sealing products and should be used only as a general guide. Contact with improper fluids might influence the application properties. The compound meets the specifications of the positive list to 21 CFR 177.2680 'Polyurethane resins' of the Food and Drug Administration (FDA), USA.

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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.

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