Via Emilia,292 – 40068 San Lazzaro di Savena (BO)
Tel. 0516258101/102 – Fax. 0516258098
www.sixten.it – sixten@sixten.it

Material Data Sheet U535-B95

Polyurethane U535-B95 – blue

General

U535-B95 is a hydrolysis–resistant (H-PU), casted Polyurethane, based on MDI, Polycarbonate Polyol and certain additives, developed for food grade applications. It is resistant to mineral and vegetable oils and aromatic hydrocarbons. Due to the excellent overall properties it is also recommended as a standard sealing material for most hydraulic applications.

Physical properties

Density:	DIN ISO 1183-1	g/cm³	1,17 ±0,03
Hardness at 23°C:	DIN ISO 7619-1	Shore A	95 ±2
Hardness at +100°C:	DIN ISO 7619-1	Shore A	93 ±2
100% Modulus:	DIN 53504	N/mm²	≥ 10
300% Modulus:	DIN 53504	N/mm²	≥ 30
Tensile strength:	DIN 53504	N/mm²	≥ 50
Elongation at break:	DIN 53504	%	≥ 350
Tear strength:	DIN ISO 34-1	kN/m	≥ 100
Compression set, 24h, 70°C, 25%:	DIN ISO 815-1	%	≤ 25
Compression set, 24h, 100°C, 25%:	DIN ISO 815-1	%	≤ 35

Temperature range: **-30°C to 125°C**

Chemical resistance

Resistant to:	Water up to 90°C, Sea Water, Mineral Oils, Vegetable Oils, Silicone Oils, Ozone, Oxygen (cold), HFA fluids, HFB fluids, diluted Acids and Lyes
Not Resistant to:	Steam, conc. Acids and Lyes, conc. Alcohols, Solvents, HFD fluids

Main application

U535-B95-FG can be used in various food contact applications. It can also be used in static and dynamic applications, mostly used for U-seals, wipers and packings up to 400 bar pressure in standard hydraulics. 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.

Available certificates

- Conform to (EC) No 1935/2004 and (EC) No 10/2011
- Conform to positive list of FDA 21 CFR 177.2600
- Conform to Chinese Standard GB 4806.7-2016

Analysis and Evaluation

Values mentioned above are based on several tests performed during development and production of the material. Tests have been performed on standard test pieces specified within the relevant standard within the laboratory. Tests performed on any other pieces which are not related to the corresponding standard or made out of any (semi)finished part or any other part deviating in production process, dimension or age of the material from above may result in different values. The data represent our present empirical values and do not disengage the processor or user from his obligation to examine the usage of the material for his specific application.

