

M SEALS HPU-PB79

Hydrolysis Resistant Super Soft Polyurethane

MATERIAL DATA SHEET (Version 6.0 – 05.2022)



Elastic Properties



Hydrolysis Resistance

Description

HPU-PB79 is our super soft grade of Hydrolysis-Resistant Polyurethane (H-PU). This material has excellent elastic behaviour and is an extremely flexible polyurethane. Due to the excellent flexibility of this material it is much easier to install and is useful for applications that may require a very high degree of compression and/or deflection.

HPU-PB79 can be used in Water up to +90°C, Sea Water, HFA and HFB fluids, Mineral, Vegetable and Silicone oils. It should not be used in Steam, Solvents, Concentrated Alcohols or Acids and HFD fluids. Its use in Water Glycol (HFC) fluids is only limited by temperature, please contact our technical department for further information.

Physical Properties

Property	Test method	Unit	Typical value
Colour			Petrol Blue
Density	ISO 1183-1	g/cm ³	1.15
Hardness @ 23°C	ISO 7619-1	Shore A	79
Hardness @ +100°C	ISO 7619-1	Shore A	72
100% Modulus	DIN 53504	N/mm ²	≥ 5.5
Tensile Strength	DIN 53504	N/mm ²	≥ 30
Elongation at break	DIN 53504	%	≥ 310
Tear strength	ISO 34-1 B	kN/m	≥ 35
Compression set (24 Hours @ 70°C, 25%)	ISO 815-1	%	≤ 30
Compression set (24 Hours @ 100°C, 25%)	ISO 815-1	%	≤ 35
Minimum service temperature			-25°C
Maximum service temperature			+100°C

Main Characteristics

- Excellent hydrolysis resistance
- Good elastic behaviour
- Excellent flexibility
- Easy installation

Typical Products

- U-Seals
- Pneumatic seals
- Preload elements
- Static seals

Typical applications

Due to its very soft nature this material has reduced wear resistance, so it is advisable to use HPU-PB79 mainly for static preload elements, or low-pressure applications such as pneumatic piston U-Seals and Wiper seals.

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