

## MATERIAL DATA SHEET

### XSLH-PU

XSLH-PU is a MDI based hard grade thermoplastic and casted polyurethane system (TPU + CPU) which has been specially modified and developed for sealing applications. XSLH-PU has been optimized in regards to hydrolysis stability, mechanical properties, reduced friction and wear by adding solid lubricants (MoS<sub>2</sub>). It has a high tensile strength, a high abrasion resistance, low hysteresis, good flexibility at low temperatures (-20 °C) and a low compression-set.

XSLH-PU is recommended to use in high temp. natural and sea-water applications, for the use in flame retardant hydraulic fluids (HFA- HFB fluids), as well as in biological degradable fluids (vegetable oils and synthetic esters).

XSLH-PU is highly resistant to radiation and has a low gas permeability.

#### MECHANICAL | ELECTRICAL | THERMAL PROPERTIES

Colour:			dark grey
Hardness at 20°:	DIN 53505	Shore D	57 +/-2
Density:	DIN ISO 1183-1	g/cm <sup>3</sup>	1.22
100% Modulus:	DIN 53504	N/mm <sup>2</sup>	> 16
300% Modulus:	DIN 53504	N/mm <sup>2</sup>	> /
Tensile strength:	DIN 53504	N/mm <sup>2</sup>	> 40
Elongation at break:	DIN 53504	%	> 300
Rebound resilience:	DIN 53512	%	> /
Tear strength:	DIN ISO 34-1	N/mm <sup>2</sup>	> 170
Abrasion:	DIN 53516	mm <sup>3</sup>	< 25
Compression set:*	DIN ISO 815-1	%	< /
Compression set:**	DIN 53517	%	< 29
Compression set:***	DIN 53517	%	< 33
Compression set:****	DIN 53517	%	< /
Min. service temperature:		°C	- 20
Max. service temperature (short term):		°C	+ 110
Tg Glass Transition Temp.:		°C	/

\* Compression set @ 70°C, 70 hours, 10% deflexion

\*\* Compression set @ 70°C, 24 hours, 20% deflexion

\*\*\* Compression set @ 100°C, 24 hours, 20% deflexion

\*\*\*\* Compression set @ -40°C, 70 hours, 10% deflexion

#### REMARK

All test methods and values mentioned above are corresponding to ASTM | DIN | ISO standards and have been tested on standardized plates in the laboratory. All tests are made under laboratory conditions.