

LT-Pur

Color - blue

LT-Pur is a thermoplastic polyurethane elastomer (TPU), which has been modified to operate at low temperatures (to about -50°C) without loss of main physical and mechanical characteristics. Compared with Pur, LT-Pur has higher elasticity (better than silicone rubber MVQ).

Application

LT-Pur can be used in the same sphere of application as Pur, but at lower temperatures, primarily in cold climatic zones.

Resistance

Good resistance	Average resistance	Low resistance
Hydraulic fluids based on mineral oil	Non-ethanol fuel	Aromatic hydrocarbons (toulene, benzene)
Mineral oil and grease (modifying additives can cause the decrease)	Biodegradable hydraulic oils (HEES, HETG)	Ketones, methyl ethyl, glycols.
Water up to +40°C	Fire-resistant hydraulic fluids	Brake fluids based on glycol
Aliphatic hydrocarbons (propane, butane)	Silicone oil and grease	Fire-resistant hydraulic fluids HFC and HFD
Compressed Air up to 110°C	-	Hot water, steam, alkali, amines, acids and base.

Mainly used

- Wipers
- Piston seals
- Rod seals
- O-Rings
- Rotor seals

LT-Pur Material Data Sheet

Properties	Value	Unit	Standard
Hardness	95 +/-3	Sh A	DIN 53505
Hardness	48+/-3	Sh D	DIN 53505
Density	1,18	g/cm ³	DIN 53479 or DIN EN ISO 1183-1
Compression set - 40°C / 70 h, 10 % deformation	40	%	DIN 53517 or DIN ISO 815-1
Compression set 70°C / 70 h, 10 % deformation	20	%	DIN 53517 or DIN ISO 815-1

Glass temperature	-42	°C	
100 % modulus	≥12	N/mm ²	DIN 53504
Rebound resilience	48	%	DIN 53512
Tensile strength	≥48	N/mm ²	DIN 53504
Elongation at break	≥440	%	DIN 53504
Tear strength	75	N/mm	DIN 53515 or DIN ISO 34-1
Abrasion	14	mm ³	DIN 53516
Min. service temperature	-50	°C	
Max. service temperature	+110	°C	