

Product Texts

Sampo UNI is a polycaprolactone-based thermoplastic polyurethane.

Sampo UNI is characterised by the following features:

- Very good tensile strength, elongation at break and tear resistance
- Wide range of application temperature from -30°C to 110°C (depending on media)
- Hydrolysis resistance up to 60°C
- Good chemical resistance
- Suitable for turning, milling and grinding operations with very low tool wear

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Compression set at 70 °C, 24h	25	%	ISO 815
Compression set at 100 °C, 24h	33	%	ISO 815
Tear strength	100	kN/m	ISO 34-1
Abrasion resistance	27	mm ³	ISO 4649
Shore A hardness	93	-	ISO 7619-1
Shore D hardness	47	-	ISO 7619-1
Other Standards^[5]			
Tensile Strength	50	MPa	DIN 53504
Strain at break	450	%	DIN 53504
Stress at 100% elongation	13	MPa	DIN 53504
Stress at 300% elongation	69	MPa	DIN 53504

S: These properties are reported by the producer according standards that are different to our defaults.

Other properties	Value	Unit	Test Standard
Density	1200	kg/m ³	ISO 1183

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	80	°C	-
Pre-drying - Time	3	h	-
Processing humidity	≤0.03	%	-
Melt temperature	225 - 235	°C	-
Mold temperature	20 - 60	°C	-
Feed temperature	25 - 40	°C	-
Zone 1	195 - 205	°C	-
Zone 2	205 - 215	°C	-
Zone 3	210 - 225	°C	-
Nozzle temperature	225 - 235	°C	-

Characteristics

Processing

Injection Molding

Delivery form

Pellets, White

Features

Acoustical Barrier Properties

Chemical Resistance

General Chemical Resistance, Hydrolytically Stable, Oil Resistance

Regional Availability

Europe