

Technical Data Sheet

Type: Pearlthane® D11H92S is a polycaprolactone copolyester-based thermoplastic polyurethane.

Main Application: Injection Moulding

Special Features: Excellent flow and mechanical properties and an outstanding low compression set value and high temperature resistance.

Physical Properties*	Value (Metric)	Unit	Test Method
Hardness	A/1 : 92 - D/1 : 46	Shore A/D	ISO 868
Specific Gravity	1.15	g/cm ³	ISO 2781
Tensile Strength	46	MPa	ISO 527-2/5A/500
Ultimate Elongation	460	%	ISO 527-2/5A/500
Tensile Stress at 50 % Elongation		MPa	ISO 527-2/5A/500
100 % Elongation	10	MPa	ISO 527-2/5A/500
300 % Elongation	21	MPa	ISO 527-2/5A/500
Tear Strength Unnicked	125	kN/m	ISO 34-1B
Abrasion Resistance	20	mm ³	ISO 4649-A
Vicat Softening Point	Annealed 139/ Unannealed 133	°C	ISO 306 (A50)

*Based on moulded plaques.

Listed values are "typical (average) values" and should/can not be applied for specification purposes.

See reverse side for processing information.

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Material Preparation

Prior to processing, Pearlthane® D11H92S must be dried at 90°C during 3 hours. It is recommended to dry the material in a dehumidifying-type dryer. Target dew point to be below -30°C, preferably -40°C.

Recommended Injection Moulding Temperature Profile:

	°C
Feed zone	40
Zone 1	190
Zone 2	195
Zone 3	195
Zone 4	195
Nozzle	200

For further information refer to Lubrizol Advanced Materials processing guides.

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