

Technical Data Sheet

Type: Pearlthane™ D11H92S is a polycaprolactone copolyester-based thermoplastic polyurethane. Excellent flow and mechanical properties and an outstanding low compression set value and high temperature resistance.

Main application: Injection Moulding

Physical Properties	Value (Metric)	Unit	Test Method
Hardness	A/3: 92- D/3: 46	Shore A/D	ISO 868
Specific Gravity	1.15	g/cm ³	ISO 2781
Tensile Strength	47	MPa	ISO 527-2/5A/500
Ultimate Elongation	511	%	ISO 527-2/5A/500
Tensile Stress at:			
- 100 % Elongation	8	MPa	ISO 527-2/5A/500
- 300 % Elongation	17	MPa	ISO 527-2/5A/500
Compression Set:			
- 70h / 23°C	13	%	ASTM 395B
- 22h / 70°C	19	%	ASTM 395B
- 70h / 100°C	37	%	ASTM 395B
Tear Strength nicked	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)

See reverse side for processing information

* Based on moulded plaques

Listed values are “typical (average) values” and should /cannot be applied for specification purposes

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Material Preparation

Prior to processing, **Pearlthane™ D11H92S** be dried at **100°C** for 2 hours. It is recommended to dry the material in a dehumidifying type dryer. Target dew point should be **-40°C**.

Recommended Starting INJECTION MOULDING Temperature Profile:

	°C
Feed zone	40
Zone 1	185
Zone 2	190
Zone 3	190
Zone 4	195
Nozzle	195

For further information refer to Lubrizol Advanced Materials processing guides.

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