

## Technical Data Sheet

**Type:** Pearlthane® D11H95S 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 : 96 – D/1 : 49	Shore A/D	ISO 868
Specific Gravity	1.18	g/cm <sup>3</sup>	ISO 2781
Tensile Strength	50	MPa	ISO 527-2/5A/500
Ultimate Elongation	475	%	ISO 527-2/5A/500
Tensile Stress at			
50 % Elongation		MPa	ISO 527-2/5A/500
100 % Elongation	16	MPa	ISO 527-2/5A/500
300 % Elongation	26	MPa	ISO 527-2/5A/500
Compression Set			
22h @ 100°C	36	%	ASTM D395B
70h @ 23°C	18	%	ASTM D395B
22h @ 70°C	23	%	ASTM D395B
Tear Strength Unnicked	174	kN/m	ISO 34-1B
Abrasion Resistance	29	mm <sup>3</sup>	ISO 4649-A
Vicat Softening Point	Annealed 143/ Unannealed 138	°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® D11H95S 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
<b>Feed zone</b>	<b>40</b>
<b>Zone 1</b>	<b>200</b>
<b>Zone 2</b>	<b>205</b>
<b>Zone 3</b>	<b>205</b>
<b>Zone 4</b>	<b>205</b>
<b>Nozzle</b>	<b>210</b>

**For further information refer to Lubrizol Advanced Materials processing guides.**

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