

## Technical Data Sheet

**Type:** Pearlthane® CLEAR 15N85 is a polyether copolymer-based thermoplastic polyurethane.

**Main Application:** Injection Moulding

**Special Features:** Outstanding colour, a very low yellowness index as well as unique transparency.

Physical Properties*	Value (Metric)	Unit	Test Method
Hardness	A/1 : 86	Shore A/D	ISO 868
Specific Gravity	1.11	g/cm <sup>3</sup>	ISO 2781
Tensile Strength	35	MPa	ISO 527-2/5A/500
Ultimate Elongation	660	%	ISO 527-2/5A/500
Tensile Stress at			
50 % Elongation	5	MPa	ISO 527-2/5A/500
100 % Elongation	6	MPa	ISO 527-2/5A/500
300 % Elongation	10	MPa	ISO 527-2/5A/500
Tear Strength Unnicked	95	kN/m	ISO 34-1B
Abrasion Resistance	20	mm <sup>3</sup>	ISO 4649-A
Vicat Softening Point	84	°C	ISO 306 (A50)

\*Based on extruded strips.

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® CLEAR 15N85 must be dried at 100°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>185-200</b>
<b>Zone 2</b>	<b>200-230</b>
<b>Zone 3</b>	<b>210-230</b>
<b>Zone 4</b>	<b>200-220</b>
<b>Nozzle</b>	<b>200-220</b>

For further information refer to Lubrizol Advanced Materials processing guides.

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