

**Technical Data Sheet**

**Type:** Pearlbond™ 1160L is a linear, aromatic polyurethane, supplied in form of white or slightly yellowish pellets, which combines a high crystallization rate and a high thermoplasticity level.

**Uses:** Powder, film

**SPECIFICATION**


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<b>Melt Flow Index</b> (170° C / 10 Kg)	<b>25 - 55</b>	g/10 min	ISO 1133
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**CHARACTERISTICS**

Physical Properties	Value (Metric)	Unit	Test Method
Shore Hardness	90	A	ISO 868
Specific Gravity	1.18	g/cm <sup>3</sup>	ISO 2781 (ASTM D-792)
Softening range	80-85	° C	MQSA 70A
Melting range	105-110	° C	MQSA 70A
Activation temperature	65	° C	LA-17
Crystallization rate	High		MQSA 12A
Thermoplasticity	High		MQSA 68A
Viscosity Brookfield RVT (15% MEK)	100-500	MPa.s/20° C	MQSA 40A
Tensile strength	25 (3626)	MPa (psi)	ISO 527
Ultimate elongation	763	%	ISO 527
100% Elongation	5 (725)	MPa (psi)	ISO 527
300% Elongation	5 (725)	MPa (psi)	ISO 527

*\*These are typical values & should not be used for establishing specifications.*

**APPLICATIONS**

**Pearlbond™ 1160L** is used for obtaining PU films by extrusion (blow and cast) for solvent-free adhesion, by heat-seal process.

Once activated, the films provide bonds with high initial values, and which have good heat resistance. The adhesion to PVC, rubber and polyurethane materials, as well as to a variety of fabrics, is excellent.

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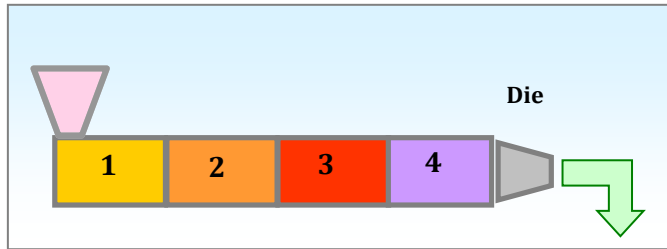
### MATERIAL PREPARATION

**Pearlbond™ 1160L** does not need to be dried. Only is advisable after long exposition to highly moisture environments.

Recommended drying conditions is 3-6 hours at 40°C in a hot air circulatory, vacuum or desiccant-air dryer, avoiding high pressures.

### EXTRUSION

The suggested processing-temperature profiles for film extrusion (flat film) are depicted in the figure below:



<b>Zone 1</b>	145° C (293° F)	155° C (311° F)
<b>Zone 2</b>	165° C (329° F)	175° C (347° F)
<b>Zone 3</b>	185° C (365° F)	195° C (383° F)
<b>Zone 4</b>	165° C (329° F)	175° C (347° F)
<b>Die</b>	145° C (293° F)	155° C (311° F)

### PACKAGING

Multifoil paper bags of 25 Kg. or PE bags of 25 Kg.

Bags are shipped on pallets of 750 kg.

### HEALTH AND SAFETY

A safety data sheet on **Pearlbond™ 1160L** is available, with all safety information. The usual safety practices in the handling of chemicals should be observed, i.e.: good ventilation in the working area, gloves and protective goggles.

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

### STORAGE

**Pearlbond™ 1160L** must be stored in a cool (15–25°C) and environment prior to being processed. Standard practice of consuming resin on first-in first-out basis should be employed.

Our **TECHNICAL SERVICE** will answer any inquiries about our product and its applications.

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