

**Technical Data Sheet**

**Type:** Pearlbond™ 960 is an aliphatic plasticizer- free polyether-based thermoplastic polyurethane. It combines excellent mechanical properties with excellent low temperature flexibility.

**SPECIFICATION**


---

<b>Melt Flow Index</b> (177° C / 2.16 Kg)	<b>1 - 12</b> g/10 min	ISO 1133
---	------------------------	----------

---

**CHARACTERISTICS**

Physical Properties	Value (Metric)	Unit	Test Method
Shore Hardness @ 1 day	60	A	ISO 868
Shore Hardness @ 3 weeks	69	A	ISO 868
Specific Gravity	1.08	g/cm3	ISO 2781 (ASTM D-792)
Softening range	125-135	° C	MQSA 70A
Melting range	170-180	° C	MQSA 70A
Activation temperature	100	° C	LA-17
Tensile strength	44 (6381)	MPa (psi)	ISO 527
Ultimate elongation	510	%	ISO 527
100% Elongation	2 (290)	MPa (psi)	ISO 527
300% Elongation	7 (1015)	MPa (psi)	ISO 527

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

**APPLICATIONS**

**Pearlbond™ 960** is suitable for use in extrusion and powder applications where the following features are of high value to the customer:

- Medium activation temperature
- High bonding strength to polar substrates
- High resistance to UV

**Pearlbond™ 960** can be converted into film, webs or nets to be used in thermobonding and interlining applications.

**Pearlbond™ 960** can be also combined with more rigid resins or reactive systems to increase flexibility and elastomeric behaviour.

The information contained herein is believed to be reliable, but no representations, guarantees or warranties of any kind are made as to its accuracy, suitability for particular applications or the results to be obtained. The information often is based on laboratory work with small-scale equipment and does not necessarily indicate end product performance or reproducibility. Formulations presented may not have been tested for stability and should be used only as a suggested starting point. Because of the variations in methods, conditions and equipment used commercially in processing these materials, no warranties or guarantees are made as to the suitability of the products for the applications disclosed. Full-scale testing and end product performance are the responsibility of the user. Lubrizol Advanced Materials, Inc. shall not be liable for and the customer assumes all risk and liability for any use or handling of any material beyond Lubrizol Advanced Materials, Inc.'s direct control. The SELLER MAKES NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. Nothing contained herein is to be considered as permission, recommendation nor as an inducement to practice any patented invention without permission of the patent owner.

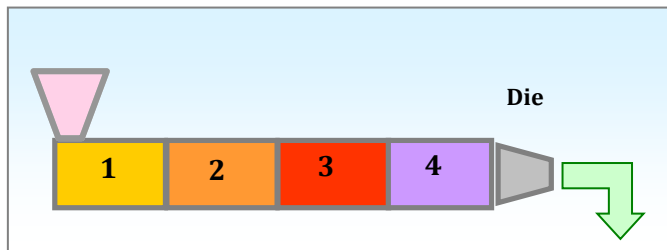


## MATERIAL PREPARATION

For optimum results, previous drying of the product during 4-5 hours at 60-70 °C is advisable, in a hot air circulatory, vacuum or desiccant-air dryer.

## EXTRUSION

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



<b>Zone 1</b>	140° C (284° F)	150° C (302° F)
<b>Zone 2</b>	180° C (356° F)	190° C (374° F)
<b>Zone 3</b>	185° C (365° F)	200° C (392° F)
<b>Zone 4</b>	185° C (365° F)	200° C (392° F)
<b>Die</b>	180° C (356° F)	190° C (374° F)

## HEALTH AND SAFETY

A safety data sheet on **Pearlbond™ 960** is available, with all information related to safety. 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™ 960** 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.

The information contained herein is believed to be reliable, but no representations, guarantees or warranties of any kind are made as to its accuracy, suitability for particular applications or the results to be obtained. The information often is based on laboratory work with small-scale equipment and does not necessarily indicate end product performance or reproducibility. Formulations presented may not have been tested for stability and should be used only as a suggested starting point. Because of the variations in methods, conditions and equipment used commercially in processing these materials, no warranties or guarantees are made as to the suitability of the products for the applications disclosed. Full-scale testing and end product performance are the responsibility of the user. Lubrizol Advanced Materials, Inc. shall not be liable for and the customer assumes all risk and liability for any use or handling of any material beyond Lubrizol Advanced Materials, Inc.'s direct control. The SELLER MAKES NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. Nothing contained herein is to be considered as permission, recommendation nor as an inducement to practice any patented invention without permission of the patent owner.

