

**Technical Data Sheet**

**Type:** Pearlthane® 12T92E is a polyester-based thermoplastic polyurethane.

**Main application:** Extrusion

**Uses:**

Physical Properties	Value (Metric)	Unit	Test Method
Hardness	A/1: 91	Shore A/D	ISO 868
Specific Gravity	1.20	g/cm <sup>3</sup>	ISO 2781
Tensile Strength	39	MPa	ISO 527-2/5A/500
Ultimate Elongation	500	%	ISO 527-2/5A/500
Tensile Stress at:			
- 50 % Elongation	7	MPa	ISO 527-2/5A/500
- 100 % Elongation	8	MPa	ISO 527-2/5A/500
- 300 % Elongation	17	MPa	ISO 527-2/5A/500
Tear Strength nicked	112	kN/m	ISO 34-1B
Abrasion Resistance	30	mm <sup>3</sup>	ISO 4649-A
Vicat Softening Point	96	°C	ISO 306 (A50)

See reverse side for processing information

\* Based on extruded strips

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

© 2018 The Lubrizol Corporation.  
All rights reserved. All marks are the property of The Lubrizol Corporation.

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.



<http://go.lubrizol.com/EP>

## Material Preparation

Prior to processing, **Pearlthane® 12T92E** be dried at **100°C** for 3-4 hours.  
It is recommended to dry the material in a dehumidifying type dryer.  
Target dew point should be **-40°C**.

## Recommended Starting EXTRUSION Temperature Profile:

	°C
Hopper cooling	Yes
Zone 1	200
Zone 2	210
Zone 3	215
Zone 4	220
Adapter (5)	210
Die (6)	210
Die TIP (7)	210

For further information refer to Lubrizol Advanced Materials processing guides.

© 2018 The Lubrizol Corporation.

All rights reserved. All marks are the property of The Lubrizol Corporation.

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.



<http://go.lubrizol.com/EP>