New TPU Luxury Finish for Automotive Interiors

Markets | Automotive
--- | ---
Polymer | Aromatic and Aliphatic Pearthane™ thermoplastic polyurethane (TPU)
Key Benefits | • High abrasion-, staining- and scratch resistance  
                   • Non-yellowing  
                   • Fast cycling, low density  
                   • Bio TPU™ by Lubrizol™ option available upon request.

Automotive interior applications have demanding technical requirements, and TPU has exactly the right property profile and versatility to make it the material of choice for injection-moulded parts. Automotive OEMs can rely on TPU’s high abrasion and scratch resistance to ensure long-term peak performance and quality. In addition, different TPU grades are available for both light and dark colours, ensuring improved UV performance and non-yellowing appearance.

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 is based on laboratory work with small-scale equipment and does not necessarily indicate end product performance. 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 of 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.

© 2018 The Lubrizol Corporation. All rights reserved. All marks are the property of The Lubrizol Corporation.
For dark-coloured automotive interior parts, **Pearlthane™ 11T85UV** and **Pearlthane 11T93** (both polycaprolactone copolyester-based TPU grades) are the most cost-effective solutions (faster moulding cycle, improved moisture stability and lower rejects) because of their unique combination of design flexibility and overall performance.

**Enhance the aesthetics of your gear knobs by using Pearlthane 91T85 aliphatic TPU**

For light colours, **Pearlthane 91T85**, based on Lubrizol’s proprietary TPU technology, provides even better colour stability upon UV exposure and good transparency in comparison to other TPU offerings:

<table>
<thead>
<tr>
<th>Lubrizol Solution</th>
<th>Main Features</th>
<th>Application</th>
<th>Common Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearlthane 11T85UV (86 Shore A)</td>
<td>Fast Cycling</td>
<td>Gear knobs, technical parts, key compartments, shutters, pads</td>
<td>Outstanding scratch and abrasion resistance. High mechanical properties (tensile, tear). Good haptics. Excellent adhesion to engineering plastics like ABS. Reduced density. Lower cost. Oil and grease resistance.</td>
</tr>
<tr>
<td>Pearlthane 11T93 (93 Shore A)</td>
<td>Fast Cycling Good Processability</td>
<td>Gear knobs, technical parts</td>
<td></td>
</tr>
<tr>
<td>Pearlthane 91T85 (88 Shore A)</td>
<td>Non-Yellowing Chemical and Staining Resistance</td>
<td>Light-colour interior parts, gear knobs, front panels etc.</td>
<td></td>
</tr>
<tr>
<td>Pearlthane ECO 12T95 (95 Shore A)</td>
<td>Bio TPU™ by Lubrizol*</td>
<td>All of above</td>
<td></td>
</tr>
</tbody>
</table>

*In addition, Bio TPU™ technology has widened material options above for gear knob manufacturers with **Pearlthane ECO 12T95** with 32% of bio-based content as certified according to ASTM D-6866.*

For more information, please visit our web: [www.lubrizol.com/Engineered-Polymers](http://www.lubrizol.com/Engineered-Polymers)