

SOLUTION DATA SHEET

Pearlstick™ TPU for Bonding of Door and Instrument Panels in Automotive Interiors



Market	Transportation
Polymer	Pearlstick thermoplastic polyurethane (TPU)
Key Benefits	<ul style="list-style-type: none"> • Very fast crystallization rate • High and long hot tack • Good sprayability • Good heat creep and final peel

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In the transportation industry, the use of the **vacuum-forming process** is the most commonly-used process in the manufacture of door trim and instrument panels (dashboards). In this process the adhesive is sprayed onto the base material (ABS, Lignotock®), and dried. This substrate is previously heat activated at 70°C (hot air), and then the foamed PVC foil is added, and vacuum is applied for 10 seconds. The edges are bonded manually by the operator.

In a vacuum forming process: **PEARLSTICK™ 45-60/08** allows the edges to be bonded automatically or manually by the operator (bonding temperature 50°-60°C).

The graphs below show the hot tack and peel strength properties of this grade in comparison to another product in the market:

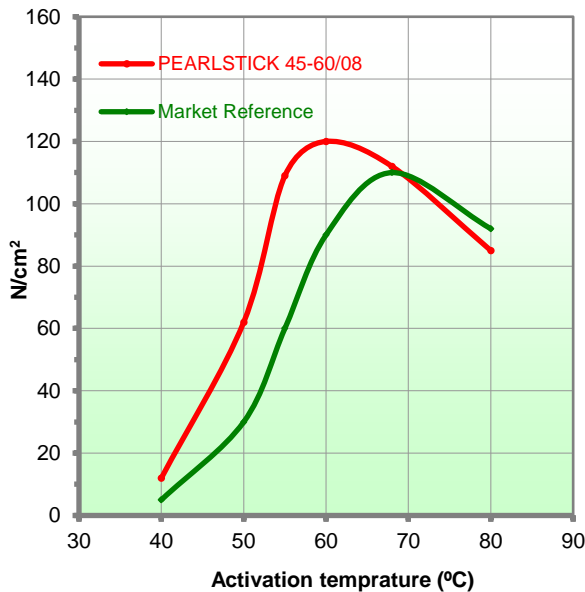


Figure 1 - Hot Tack

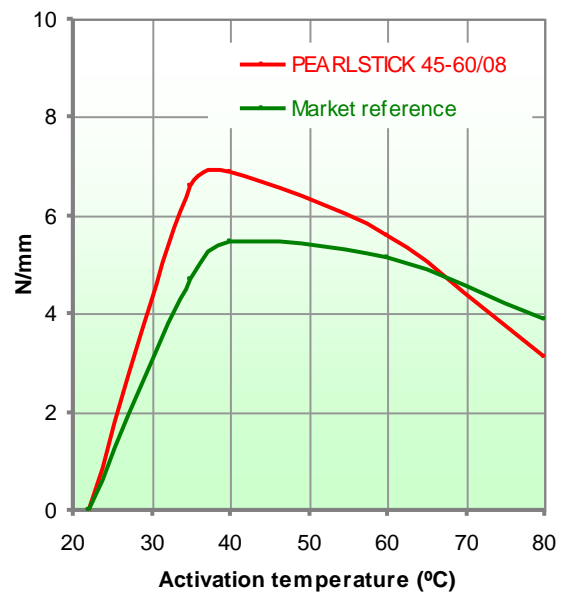


Figure 2 - Peel Strength vs. Activation Temperature

For more information, please visit: www.lubrizol.com/Engineered-Polymers

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