



OVERVIEW

Lubrizon's aliphatic TPU (thermoplastic polyurethane) combines durability and aesthetic properties in one single material. This innovative product series is perfect for colored or transparent applications where non-yellowing, durability and weatherability are key performance requirements. Designers, manufacturers and OEMs (original equipment manufacturers) can also rely on the aliphatic TPU range to meet the aesthetic demands of light and dark colored parts for a rich, colorful end product. A Bio-based* solution (59% bio-based content) is in development.

BENEFITS

- Color stability upon UV exposure
- Processed through injection molding or extrusion
- Non-yellowing appearance
- Long-term performance for superior abrasion and scratch resistance
- Fully recyclable**
- Easy to color
- Good adhesion to polar substrates
- Cost-effective manufacturing solutions (fast-cycling, high-flow or low-density grades)
- Superior chemical resistance
- Excellent flexibility, elastic/rebound and resilience properties
- Hypoallergenic and odorless

INDUSTRIAL APPLICATIONS

- Automotive interiors
- Various molded parts
- Consumer goods and appliances
- Housing/Overmolded grips

SPORTS & RECREATION APPLICATIONS

- Goggles
- Watchbands

ELECTRONIC APPLICATIONS

- Smartphones
- Headphones
- Protective cases

*Bio-based content is theoretical and is being determined according to ASTM-D6866.

**Recyclability is based on access to a readily available standard recycling program that supports such materials. Products may not be available in all areas

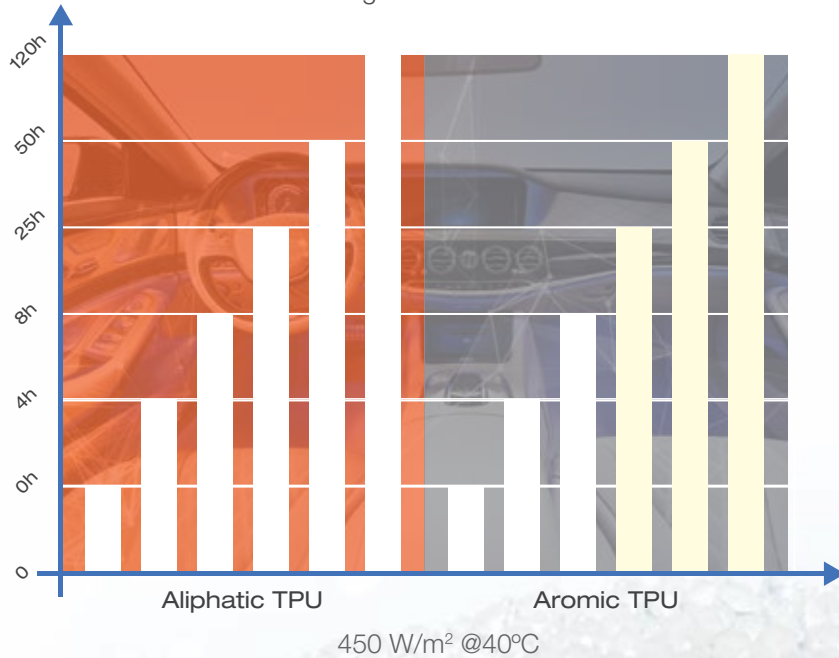
TOP PRODUCT SELECTIONS

Aliphatic TPU innovations listed per applications / grades include:

Product	Hardness	Density*	Tensile Strength	Application
Estane® D91T80 NAT 01	81 Shore A	1.11	25	Molded Parts
Pearlthane™ 91T85	88 Shore A	1.11	27	Molded Parts
Estane® D91T86 NAT 01	88 Shore A	1.12	34	Molded Parts
Pearlcoat™ Activa D198K	70 Shore A	1.10	25	Low-Gloss Molded and Co-Extruded Parts

*Density values via ISO test method

ALIPHATIC TPUs PROVIDE EXCELLENT UV resistance for light colors as shown below:



LUBRIZOL
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POLYMERS

**ADVANCING MATERIALS.
ELEVATING PERFORMANCE.**

