



## OVERVIEW

Lubrizon Engineered Polymer's Surface Protection Solutions are proven by more than 30 years of experience in the harshest environments. Road salt, flying stones, acid rain, and extreme hot and cold to name a few!

Extraordinary aliphatic TPU (thermoplastic polyurethane) grades engineered for protecting those surfaces that matter most, Estane delivers unsurpassed quality and consistency that minimize extrusion inefficiencies and waste. Whether you're an OEM or product processor, Lubrizon's Estane® Surface Protection Solutions are there for you.

## BENEFITS

- High quality and consistency for control during manufacturing processes
- Crystal clear - invisibility on any surface
- Protecting surfaces from damage by impact and abrasion
- Compatible with adhesives, inks, and coatings
- Self-healing properties maintain aesthetic quality
- Resistant to the effects of environmental exposure – color stability when exposed to UV
- Low-temperature flexibility for wider range of installation conditions
- Plasticizer-free – won't embrittle over time

## APPLICATIONS

- Paint Protection (PPF)
- Automotive Interiors
- Graphics Media and Laminates
- Signage and Labels
- Consumer Products
- Flooring
- Architectural



**AVAILABLE PRODUCTS:**

**Solutions for PPF and Graphics**

**Solutions for other applications**

Product	Shore Hardness
ESTANE® ALR CL87A-VE	87A
ESTANE® ALR CL90A-VE	90A
ESTANE® ALR CLC60D-VE	60D
ESTANE® ALR CL65D-VE	65D

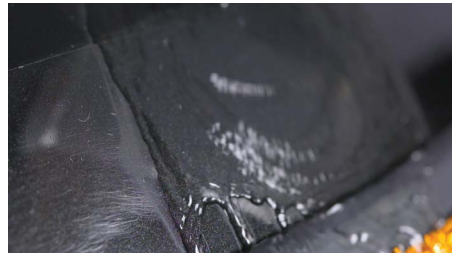
Product	Shore Hardness
ESTANE® 96F80	80A
ESTANE® 91F88	90A
ESTANE® 91F57D	57D
ESTANE® 91F65D	65D

**SELF-HEALING**

Automotive surface scratched and healed:



Steel Wool Rubbed over surface



Warm Water to Hot Air to accelerate



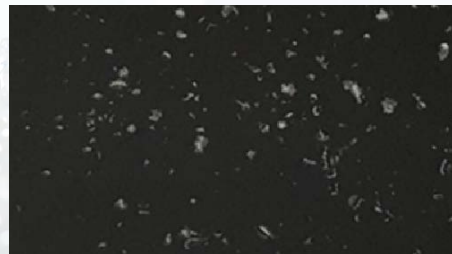
Scratches Completely Healed

**IMPACT RESISTANCE**

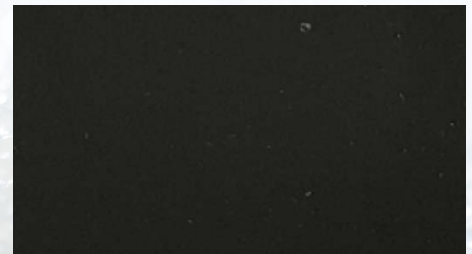
Painted metal panel impacted with and without Estane® TPU surface protection:



250-300 Stones @ 30-60 MPH via Gravelometer Test  
(\*In accordance with SAE J400)



No Protection



Estane® Surface Protection  
(6 mil film)

**LUBRIZOL**  
ENGINEERED  
POLYMERS

**ADVANCING MATERIALS.  
ELEVATING PERFORMANCE.**

