# Surface Protection Solutions 

Maintaining the Beauty of Surfaces


## OVERVIEW

Backed by more than 30 years of experience in surface protection applications, ESTANE ${ }^{\circledR}$ thermoplastic polyurethane (TPU) provides exceptional performance with transparency after long-term exposure to the elements, such as UV light, moisture, physical abuses, chemicals and more. ESTANE ${ }^{\circledR}$ TPU maintains the beauty of surfaces in the most demanding applications!

## DISCOVER AN ADVANCED LEVEL OF PROTECTION Peace of mind that it lasts.



## Weathering Resistance

Resistant to the effects of environmental exposure, maintaining aesthetic and physical properties after long-term outdoor exposure.

## Materials Compatibility

Compatible with a wide range of dissimilar materials for integrating solutions (such as substrates, adhesives, inks and coatings).

## Advanced Physical Properties

Protect damage from impact and abrasion, and self-heal small scratches to maintain beauty of surfaces.


THERMOPLASTIC POLYURETHANES

## BROAD CAPABILITIES

Lubrizol's material science and applications expertise can help transform TPU into the best solution for your surface.


TPU Film


TPU Capstock


TPU Interlayer


TPU Fiber

Renewable Energy


Transportation

## SELF-HEALING

Automotive surface scratched and healed:


Steel Wool Rubbed Over Surface


Warm Water to Hot Air to Accelerate

## IMPACT RESISTANCE

Painted metal panel impacted with and without ESTANE ${ }^{\circledR}$ TPU surface protection:


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


No Protection


Scratches Completely Healed


ESTANE ${ }^{\oplus}$ Surface Protection (6 mil film)

## LUBRIZOL <br> ENGINEERED <br> POLYMERS

