




# High-Performance Estane® TPUs for Cured-in-Place Pipe

Flexible and simple trenchless pipe rehabilitation

**ESTANE**  
THERMOPLASTIC POLYURETHANES



## For your next no-dig infrastructure rehabilitation project, don't settle for anything less than the industry's best – Estane® TPU.

With more than 40 years experience, Estane TPU is the proven global leader in TPU (thermoplastic polyurethane) technology for trenchless, cured-in-place pipe applications. Estane TPU has earned its place as the material of choice for sewer contractors, offering maximum flexibility, durability and easy installation.

### Choose the best...trust Estane TPU

Superior to other plastic alternatives, Estane TPU is built for toughness and durability. It provides an unmatched combination of heat-, chemical- and abrasion-resistance, making it ideal for lining the resin-filled felt tube used for cured-in-place pipe.

And unlike other resins used for the rehabilitation of sewer pipes – such as PE and PVC – Estane TPU exhibits exceptional tear strength, cut strength and puncture resistance during installation. Alternative resins can delaminate into sheets that will eventually block the pipe.

Estane TPU is also available as a soft material, allowing for easier installation of the liner tube – even in the most complicated sewer systems.

### Other benefits include:

- ▶ Easy on-site repair (solvent, tape, heat).
- ▶ Sufficient low-temperature flexibility provides easy storage and installation where other materials can crack.
- ▶ High melting point (~145 °C/293 °F) allows the use of hot water and steam across a wide range of pipe thicknesses.
- ▶ Depending on the rehabilitation project, Estane TPU allows the lining of sharp bends (45-90°) thanks to its low coefficient of friction and flexibility.
- ▶ Accommodates the use of a winch during installation.
- ▶ Can be used in combination with a wide range of thermosetting resin matrix systems.
- ▶ Bonds well to resin absorbent felt.



## Meeting the needs of a fast-evolving CIPP industry

As a leader in the industry, Lubrizol understands the varying needs of its customers. That's why we've developed a portfolio that is comprehensive and flexible, able to meet your application needs.

Estane TPU is compatible with the most commonly used thermoset resins, including polyester, vinyl ester and epoxies. As a result, they can be easily incorporated into both slow and fast curing systems. What's more, Estane TPU can be used in combination with hot air, hot water or steam activation processes.

## Ideal for a wide range of customer manufacturing processes

Estane TPUs are highly versatile materials that can be processed through a number of methods – meltroll coating, calendaring and flat die extrusion across a wide range of thicknesses – all in one pass. Our technical experts have extensive experience and knowledge with each of these processes to help you select the right TPU and quickly scale up your production to supply the trenchless pipe re-habilitation market.

## Global availability with a local approach

Estane TPU is backed by global resources, including advanced research and development, technical expertise and customer support that are unparalleled in the industry. Although Estane TPUs are available everywhere in the world, our experts are attentive to the needs of local markets and can help you choose the product for your specific application.

For more information on Estane TPUs for your next cured-in-place pipe application, visit us at [www.estane.com](http://www.estane.com).

**Estane TPUs**  
**Everywhere...**  
**Every Day...**



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