

#### **Technical Data Sheet**

Type: Estane<sup>®</sup> 58070 is a 70A polyester Thermoplastic Polyurethane (TPU).

Features: Outstanding Resiliency, Cold Temperature Flexibility, Fuel Resistance and Hydrolytic Stability

Uses: Hose and Tube, Injection Molding Applications

Physical Properties	Value (Metric)	Unit	Test Method
Hardness (5 sec)	72A	Shore A	ASTM-2240
Specific Gravity	1.17		ASTM D-792
Tensile Strength	4800	PSI	ASTM D-412
Ultimate Elongation	820	%	ASTM D-412
Tensile Stress at:			
- 100 % Elongation	570	PSI	ASTM D-412
- 300 % Elongation	888	PSI	ASTM D-412
Tear Strength			
Graves	441	lb/in	ASTM D-412
Trouser	110	lb/in	ASTM D-412
Taber Loss (1000 rev)	0.00003		ASTM D-3389 (H-18, 1000G)
Melting Temperature	166	°F	LUBRIZOL ADVANCED MATERIALS
Glass Transition	-50	°F	LUBRIZOL ADVANCED MATERIALS

This is preliminary data.

Prior to testing samples were conditioned at 23°C for 48 hours.

Based on extruded sheet (30 mils).

Listed values are "typical (average) values" and should/cannot be applied for specification purposes.

## **Supply Form and Standard Packaging**

• Estane® 58070 is supplied in pellet form and packaged in 50 lb. bags or 1000 lb. boxes.

### **Material Preparation**

- Prior to processing, Estane® 58070 must be dried at 210°F (98°C) for 2-4 hours.
- It is recommended to dry the material in a desiccant type dryer. Target dew point should be -40°C.
- Depending on the applied processing technique, the maximum moisture level should be 0.02%.

## **Processing Conditions**

• Estane® 58070 can be processed on any conventional extruder.

See reverse side for processing information

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# Recommended Starting <u>INSERT INJECTION MOLDING/EXTRUSION</u> Temperature Profile:

	°F/°C
Zone 1	325/165
Zone 2	335/170
Zone 3	345/175
Zone 4	355/180
Adapter (5)	355/180
Die Zone 1 (6)	355/180
Die Zone 2	355/180

Melt Temp. Mid-Range: 365°F/185°C Screen Pack Recommendation: 20/40/80/20

For further information refer to Lubrizol Advanced Materials processing guides.

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