

**Type:** Estane® 58887 is an 87A aromatic Polyether-Based Thermoplastic Polyurethane (TPU).

**Features:** Excellent hydrolysis resistance, low temperature performance, clarity and wide processing window for extrusion.

**Uses:** Blown and flat die/cast film extrusion, Injection and blow molding; cable jacketing and profile extrusion.

Physical Properties	Value (Metric)	Unit	Test Method
Hardness (5 sec)	87 +/- 3	Shore A	ASTM D-2240
Specific Gravity	1.12		ASTM D-792
Tensile Strength	7500 (51.7)	psi (MPa)	ASTM D-412
Ultimate Elongation	500	%	"
<b>Tensile Stress at:</b>			
- 100% Elongation	1000 (6.9)	psi (MPa)	ASTM D-412
- 300% Elongation	1800 (12.4)	psi (MPa)	"
<b>Tear Strength:</b>			
- Graves	500 (8.9)	lb/in (kg/mm)	ASTM D-624 (die C)
- Trouser	150 (2.7)	lb/in (kg/mm)	ASTM D-470
Taber Loss (1000 rev)	0.00141 (40)	oz (mg)	ASTM D-3389 (H18, 1000g)
T <sub>m</sub> (by DSC)	284 (40)	°F (°C)	Lubrizol Advanced Materials
T <sub>g</sub> (by DSC)	-49 (-45)	°F (°C)	Lubrizol Advanced Materials

- 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® 58887 TPU is supplied in pellet form and packaged in 50 lb bags or 1000 lb boxes.

### Material Preparation

- Prior to processing, Estane® 58887 TPU must be dried at **220°F (104°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® 58887 TPU can be processed on any conventional extruder.

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**Recommended Starting Extrusion Temperature Profile:**

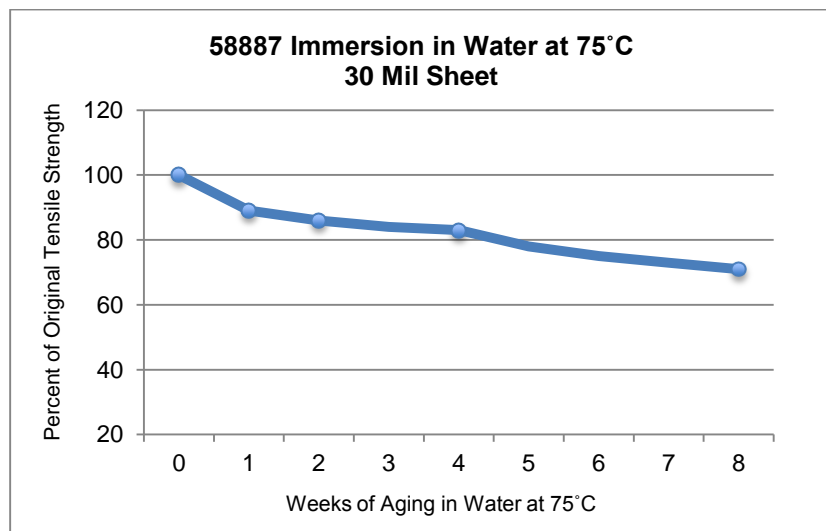
	°F/°C
<b>Zone 1</b>	<b>350/177</b>
<b>Zone 2</b>	<b>360/182</b>
<b>Zone 3</b>	<b>370/188</b>
<b>Zone 4</b>	<b>380/193</b>
<b>Adapter (5)</b>	<b>380/193</b>
<b>Die Zone 1 (6)</b>	<b>380/193</b>
<b>Die Zone 2</b>	<b>380/193</b>

Melt Temp. Mid-Range: 375°F/191°C  
Screen Pack Recommendation: 20/40/80

**Application Information: High Performance Film & Sheet**

Properties	Value (Metric)	Unit	Test Method
Tensile Set (200% elongation)	18	%	ASTM D-412
Kofler Melt Point	302 (150)	°F (°C)	Lubrizol Advanced Materials
Haze (pressed between glass)	1.0	%	ASTM D-1003
Volume Swell in Water (24h/23°C)	1.1	%	ASTM D-471
FDA 177.1680 (dry bulk foods)	Complies*		
FDA 177.2600 (wet/fatty foods)	Complies		
NSF 61 Status	Listed		

\*Only for repeat use articles.



**For further information refer to Lubrizol Advanced Materials processing guides.**

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