Technical Data Sheet

Type: **Estane® 58315** is an 85A aromatic Polyether-Based Thermoplastic Polyurethane (TPU).

Features: Very good physical properties, hydrolysis resistance, low temperature performance and abrasion. Wide processing window for extrusion.

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

Physical Properties	Value (Metric)	Unit	Test Method
Hardness (5 sec)	85 +/- 3	Shore A	ASTM D-2240
Specific Gravity	1.12		ASTM D-792
Tensile Strength	7000 (48.3)	psi (MPa)	ASTM D-412
Ultimate Elongation	570	%	"
Tensile Stress at:			
- 100 % Elongation	900 (6.2)	psi (MPa)	ASTM D-412
- 300 % Elongation	1500 (10.3)	psi (MPa)	"
Tear Strength			
Graves	490 (8.7)	lb/in (kg/mm)	ASTM D-624 (die C)
Trouser	150 (2.7)	lb/in (kg/mm)	ASTM D-470
Taber Loss (1000 rev)	0.00130 (37)	oz (mg)	ASTM D-3389 (H18, 1000g)
T_m (by DSC)	275 (135)	°F (°C)	Lubrizol Advanced Materials
T_g (by DSC)	-58 (-50)	°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® 58315 TPU** is supplied in pellet form and packaged in 50 lb bags or 1500 lb boxes.

Material Preparation

• Prior to processing, **Estane® 58315 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%.

Material Preparation

• **Estane® 58315 TPU** can be processed on any conventional extruder.

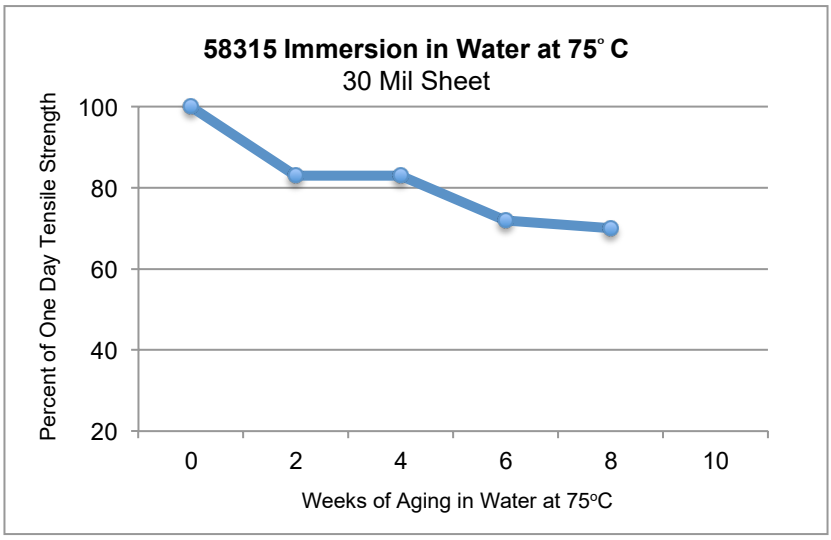
Recommended Starting Extrusion Temperature Profile:

	°F/°C
Zone 1	**340/171**
Zone 2	**350/177**
Zone 3	**360/182**
Zone 4	**370/188**
Adapter (5)	**370/188**
Die Zone 1(6)	**370/188**
Die Zone 2	**370/188**

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

High Performance Film & Sheet

Application Properties	Value (Metric)	Unit	Test Method
Tensile Set (200% elongation)	14	%	ASTM D-412
Kofler Melt Point	293 (145)	°F (°C)	Lubrizol Advanced Materials
Haze (pressed between glass)	1.8	%	ASTM D-1003
Volume Swell in Water (24h/23°C)	1.7	%	ASTM D-471



For further information refer to Lubrizol Advanced Materials processing guides.

http://go.lubrizol.com/EP