Technical Data Sheet

Type: Estane® 58630 is an 82A aromatic Polyether-Based Thermoplastic Polyurethane (TPU).

Features: Good physical properties, hydrolysis resistance, low temperature performance and abrasion along with wide processing window for extrusion and low surface tack.

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

Physical Properties	Value (Metric)	Unit	Test Method
Hardness (5 sec)	82 +/- 3	Shore A	ASTM D-2240
Specific Gravity	1.13		ASTM D-792
Tensile Strength	6000 (41.4)	psi (MPa)	ASTM D-412
Ultimate Elongation	640	%	"
Tensile Stress at:			
- 100% Elongation	750 (5.2)	psi (MPa)	ASTM D-412
- 300% Elongation	1100 (7.6)	psi (MPa)	"
Tear Strength:			
- Graves	400 (7.1)	lb/in (kg/mm)	ASTM D-624 (die C)
- Trouser	130 (2.3)	lb/in (kg/mm)	ASTM D-470
Taber Loss (1000 rev)	0.0022 (60)	oz (mg)	ASTM D-3389 (H18, 1000g)
T_m (by DSC)	248 (120)	°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® 58630 TPU** is supplied in pellet form and packaged in 50 lb bags or 1000 lb boxes.

Material Preparation

• Prior to processing, **Estane® 58630 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® 58630 TPU** can be processed on any conventional extruder.

Recommended Starting Extrusion Temperature Profile:

	°F/°C
Zone 1	**330/166**
Zone 2	**340/171**
Zone 3	**350/177**
Zone 4	**360/182**
Adapter (5)	**360/182**
Die Zone 1 (6)	**360/182**
Die Zone 2	**360/182**

Melt Temp. Mid-Range: 355°F/179°C
Screen Pack Recommendation: 20/40/80

High Performance Film & Sheet

Properties	Value (Metric)	Unit	Test Method
Tensile Set (200% elongation)	15	%	ASTM D-412
Kofler Melt Point	257 (125)	°F (°C)	Lubrizol Advanced Materials
Volume Swell in Water (24h/23°C)	2.1	%	ASTM D-471

For further information refer to Lubrizol Advanced Materials processing guides.

.