

Technical Data Sheet

Type: Estane® 58213 is an 75A aromatic Polyester-Based Thermoplastic Polyurethane (TPU).

Features: Excellent blend partner for PVC and general adhesive and good physical properties.

Uses: Flat die/cast film extrusion and hose jacketing, Calendaring/melt coating.

Physical Properties	Value (Metric)	Unit	Test Method
Hardness (5 sec)	75 +/- 3	Shore A	ASTM D-2240
Specific Gravity	1.18		ASTM D-792
Tensile Strength	5500 (37.9)	psi (MPa)	ASTM D-412
Ultimate Elongation	680	%	"
Tensile Stress at:			
- 100 % Elongation	400 (2.8)	psi (MPa)	ASTM D-412
- 300 % Elongation	600 (4.1)	psi (MPa)	"
Tear Strength			
Graves	300 (5.4)	lb/in (kg/mm)	ASTM D-624 (die C)
Trouser	100 (1.8)	lb/in (kg/mm)	ASTM D-470
Taber Loss (1000 rev)	0.00023 (6.4)	oz (mg)	ASTM D-3389 (H18, 1000g)
T _m (by DSC)	230 (110)	°F (°C)	Lubrizol Advanced Materials
T _g (by DSC)	-22 (-30)	°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® 58213 TPU** is supplied in pellet form and packaged in 50 lb bags or 1000 lb boxes.

Material Preparation

- Prior to processing, **Estane® 58213 TPU** must be dried at **130°F (54°C)** for 2-4 hours to a recommended maximum moisture level of 0.02%.
- It is recommended to dry the material in a desiccant type dryer. Target dew point should be **-40°C**.

Material Preparation

- **Estane® 58213 TPU** can be processed on any conventional extruder.

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Recommended Starting Extrusion Temperature Profile:

	°F/°C
Zone 1	330/166
Zone 2	340/171
Zone 3	350/176
Zone 4	360/182
Adapter (5)	360/182
Die Zone 1	360/182
Die Zone 2	360/182

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

Application Information: High Performance Film & Sheet

Properties	Value (Metric)	Unit	Test Method
Tensile Set (200% elongation)	6	%	ASTM D-412
Kofler Melt Point	212 (100)	°F (°C)	Lubrizol Advanced Materials
FDA 177.1680 (dry bulk foods)	Complies*		
FDA 177.2600 (wet/fatty foods)	Complies		

*For repeat use applications only.

For further information refer to Lubrizol Advanced Materials processing guides.

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