Estane® AG 4350 TPU

Wednesday, November 6, 2019

Lubrizol Advanced Materials, Inc. - Thermoplastic Polyurethane Elastomer (Polyether)

General Information

Product Description

Type: Estane® AG 4350 is a Polyether based aliphatic polyurethane specifically formulated to be used as an adhesive interlayer without the need for a glass surface primer. This polymer is designed for flat die extrusion into sheet and film.

Features: Designed for the lamination of optical transparencies using dissimilar products such as glass, polycarbonate, acrylic and cellulose acetate butyrate (CAB).

Uses: Mid to low modulus, excellent low temperature impact resistance and tensile strength this is ideal for large span curved transparencies.

General			
Material Status	• Commercial: Active		
Availability	• Latin America	• North America	
Features	• Aliphatic	• Low Temperature Impact Resistance	
Uses	• Film	• Laminates	• Sheet
Forms	• Pellets		
Processing Method	• Film Extrusion	• Sheet Extrusion	

ASTM & ISO Properties [1]

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.05		ASTM D792
Elastomers	**Nominal Value**	**Unit**	**Test Method**
Tensile Stress [2] (100% Strain)	450	psi	ASTM D412
Tensile Stress [2] (200% Strain)	850	psi	ASTM D412
Tensile Stress [2] (300% Strain)	1200	psi	ASTM D412
Tensile Strength [2] (Break)	3500	psi	ASTM D412
Tensile Elongation [2] (Break)	550	%	ASTM D412
Tear Strength [3]	290	lbf/in	ASTM D624
Thermal	**Nominal Value**	**Unit**	**Test Method**
Glass Transition Temperature	-76.0	°F	DSC
CLTE - Flow	1.1E-4	in/in/°F	Internal Method
TMA			Internal Method
Peak	210	°F	
Range	149 to 230	°F	
Optical	**Nominal Value**	**Unit**	**Test Method**
Refractive Index [4]	1.488		ASTM D542
Transmittance [4] (50.0 mil)	85.0 to 95.0	%	ASTM D1003
Haze [4] (50.0 mil)	0.00 to 0.300	%	ASTM D1003
Yellowness Index [4] (0.0500 in)	< 1.0	YI	ASTM D1925

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Notes

[1] Typical properties: these are not to be construed as specifications.

[2] 20 in/min

[3] Die C

[4] Between two pieces of 1/8 inch glass