POLYTROPE® STR 1040EU-01 NATURAL

Enhanced TPO Polyolefin

A. Schulman Inc.

Message:

POLYTROPE STR 1040EU resin is a high melt strength thermoformable TPO that balances impact resistance and high stiffness, enabling processors and end users to reduce product weight and improve processing efficiency without sacrificing product performance. The attractive performance features of POLYTROPE STR 1040EU resin uniquely positions it as a economically favorable option to traditional engineered resins. It can be extruded in smooth or textured surfaces, or co-extruded with a POLYTROPE STR enhanced polyolefin cap resin to further customize its' durability, appearance, or feel for interior and exterior applications. The capability of POLYTROPE STR 1040EU to provide an exceptionally smooth surface in extrusion and thermoforming makes it well suited to lamination processes with decorative films. It is also easily colored and is paintable by standard TPO paint systems.

General Information	
Features	Good Melt Strength
	Good Weather Resistance
	Low CLTE
	Low Temperature Impact Resistance
	Paintable
	Recyclable Material
Forms	Pellets
Processing Method	Coextrusion
	Extrusion
	Profile Extrusion
	Sheet Extrusion
	Thermoforming

Physical	Nominal Value	Unit	Test Method
Specific Gravity [1]	1.09	g/cm³	ISO 1183
Melt Mass-Flow Rate (MFR) (230°C/2.16 kg)	0.50	g/10 min	ISO 1133
Molding Shrinkage (23°C, 24 hr, 3.18 mm)	0.70 to 0.90	%	ISO 294-4
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Stress [2] (Yield, 23°C)	25.7	MPa	ISO 527-2
Tensile Strain [3] (Break, 233°C)	320	%	ISO 527-2
Flexural Modulus - Chord [4] (23°C)	2760	MPa	ISO 178
Impact	**Nominal Value**	**Unit**	**Test Method**
Notched Izod Impact - Flow			ASTM D256
-30°C, 3.18 mm, Injection Molded	48	J/m	
23°C, 3.18 mm, Injection Molded	890	J/m	
Instrumented Dart Impact (-30°C, Total Energy, Ductile Failure)	40.7	J	ASTM D3763
Thermal	**Nominal Value**	**Unit**	**Test Method**

Heat Deflection Temperature (0.45 MPa, Unannealed)	114	°C	ISO 75-2/Bf
CLTE - Flow (-30 to 100°C)	4.1E-5	cm/cm/°C	ASTM E831
Flammability	Nominal Value		Test Method
Flame Rating (3.18 mm, All Colors)	HB		UL 94
Optical	Nominal Value		Test Method
Gardner Gloss (60°, 3180 µm, Thermoformed, Smooth)	20 to 40		ISO 2813
Additional Information	Nominal Value	Unit	Test Method
Heat Sag - 8 inch span, two point support (149°C, 3.20 mm)	0.00	mm	ASTM D3769
NOTE			
1.	Method A		
2.	Type 1, 50 mm/min		
3.	Type 1, 50 mm/min		
4.	Type 1A, 2.0 mm/min		

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China