

Technical Data Sheet

POLYTROPE[®] STR 3566EU-01 CLEAR

Enhanced Polyolefin (Capstock Resin)
Engineering Plastics

Product Description

POLYTROPE STR 3566EU resin is a high gloss, weatherable, olefin cap resin possessing high clarity. It is non-stress whitening and provides exceptional durability against denting and scratches. It is specifically designed for the co-extrusion process as a cap resin over POLYTROPE STR enhanced polyolefin TPO and FR TPO base resins. It is especially suited for thermoformed applications, as it maintains its' crystal clarity, DOI, and high gloss through the thermoforming process. POLYTROPE STR 3566EU-01 CLEAR can be used as a clear cap or it can be easily colored. The high clarity, gloss and durability of the cap resin enables it match or exceed the performance and appearance of acrylic resins, laminated films, and paint coatings. The innovative technology of this cap resin is patent pending.

General

Features	<ul style="list-style-type: none"> Chemical Resistant Durable High Clarity 	<ul style="list-style-type: none"> High Scratch Resistance Low Temperature Impact Resistance Recyclable Material 	<ul style="list-style-type: none"> Stain Resistant Stress Whitening Resistant Weather Resistant
Automotive Specifications	<ul style="list-style-type: none"> GM 9986276 ¹ 		
Forms	<ul style="list-style-type: none"> Pellets 		
Processing Method	<ul style="list-style-type: none"> Coextrusion Extrusion 	<ul style="list-style-type: none"> Profile Extrusion Sheet Extrusion 	<ul style="list-style-type: none"> Thermoforming

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density / Specific Gravity ²	0.900	0.898 g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (230°C/2.16 kg)	3.0 g/10 min	3.0 g/10 min	ISO 1133
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Stress ³ (Yield, 73°F (23°C))	3500 psi	24.1 MPa	ISO 527-2
Tensile Strain ³ (Break, 451°F (233°C))	500 %	500 %	ISO 527-2
Flexural Modulus - Chord ⁴ (73°F (23°C))	145000 psi	1000 MPa	ISO 178
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Instrumented Dart Impact 5°F (-15°C), Total Energy, Ductile Failure	340 in-lb	38.4 J	ASTM D3763
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Heat Deflection Temperature 66 psi (0.45 MPa), Unannealed	170 °F	76.7 °C	ISO 75-2/Bf
Flammability	Nominal Value (English)	Nominal Value (SI)	Test Method
Flame Rating (0.13 in (3.2 mm), All Colors)	HB	HB	UL 94
Optical	Nominal Value (English)	Nominal Value (SI)	Test Method
Gardner Gloss 60°, 125 mil (3180 µm), Thermoformed, Smooth	85 to 95	85 to 95	ISO 2813

Notes

¹ Moldable film on TPO for exterior parts.

² Method A

³ Type 1, 2.0 in/min (50 mm/min)

⁴ Type 1A, 0.079 in/min (2.0 mm/min)

Notes

These are typical property values not to be construed as specification limits.