

Technical Data Sheet



Polytrope STR 3566EU-01 CLEAR

Enhanced Polyolefin (Capstock Resin)

LyondellBasell Industries

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

Material Status	• Commercial: Active		
Availability	• North America		
Features	• Chemical Resistant • Durable • Good Weather Resistance	• High Clarity • High Scratch Resistance • Low Temperature Impact Resistance	• Recyclable Material • Stain Resistant • Stress Whitening Resistant
Automotive Specifications	• GM 9986276 ¹		
Forms	• Pellets		
Processing Method	• Coextrusion • Extrusion	• Profile Extrusion • Sheet Extrusion	• 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
Deflection Temperature Under Load 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
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.

Processing Techniques

Specific recommendations for resin type and processing conditions can only be made when the end use, required properties and fabrication equipment are known.

Product Storage and Handling

- Product should be stored in dry conditions at temperatures below 50°C and protected from UV-light

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- Improper storage may bring damage to the packaging and can negatively affects on the quality of this product
- Keep material completely dry for good processing

Company Information

For further information regarding the LyondellBasell company, please visit <http://www.lyb.com/>.

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