

Technical Data Sheet

Polytrope STR 3566EU-01 CLEARNAT



Polyolefin, Enhanced

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.

Regulatory Status

For regulatory compliance information, see *Polytrope* STR 3566EU-01 CLEARNAT [Product Stewardship Bulletin \(PSB\)](#) and [Safety Data Sheet \(SDS\)](#).

Status	Commercial: Active
Availability	North America
Processing Method	Coextrusion; Extrusion; Profile Extrusion; Sheet Extrusion
Attribute	Durable; Good Chemical Resistance; Good Weather Resistance; High Clarity; High Scratch Resistance; Low Temperature Impact Resistance; Recyclable Material; Stain Resistant; Stress Whitening Resistant
Forms	Pellets

Typical Properties	Nominal Value	Units	Test Method
Physical			
Melt Flow Rate, (230 °C/2.16 kg)	3.0	g/10 min	ISO 1133
Density - Specific Gravity, (Method A)	0.898	g/cm ³	ISO 1183
Mechanical			
Tensile Stress at Yield, (Type 1, 23 °C, 50 mm/min)	24.1	MPa	ISO 527-2
Tensile Strain at Break, (Type 1, 233 °C, 50 mm/min)	500	%	ISO 527-2
Flexural Modulus, (23 °C, 2.0 mm/min, Type 1A, Chord)	1000	MPa	ISO 178
Impact			
Instrumented Dart Impact, (-15 °C, Total Energy, Ductile Failure)	38.4	J	ASTM D3763
Thermal			
Deflection Temperature Under Load Unannealed (0.45 MPa), (Flatwise)	76.7	°C	ISO 75-2/B
Optical			
Gloss, (60°, 3180 µm, Smooth, Thermoformed)	85 to 95		ISO 2813
UL Information			
Flame Rating, (3.2 mm)	HB		UL 94

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.

Company Information

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

© LyondellBasell Industries Holdings, B.V. 2018

Disclaimer

Information in this document is accurate to the best of our knowledge at the date of publication. The document is designed to provide users general information for safe handling, use, processing, storage, transportation, disposal and release and does not constitute any warranty or quality specification, either express or implied, including any warranty of merchantability or fitness for any particular purpose. Users shall determine whether the product is suitable for their use and can be used safely and legally.

In addition to any prohibitions of use specifically noted in this document, LyondellBasell may further prohibit or restrict the sale of its products into certain applications. For further information, please contact a LyondellBasell representative.

Trademarks

The Trademark referenced within the product name is owned or used by the LyondellBasell family of companies.