

Technical Data Sheet

POLYTROPE® STR 3570EU-01 CLEAR

Enhanced Polyolefin (Capstock Resin)
Engineering Plastics

Product Description

POLYTROPE STR 3570EU resin is a high gloss, non-stress whitening, weatherable, olefin cap resin providing exceptional durability. It is specifically designed for the co-extrusion process as a cap resin over ethylene base resins such as HMWPE. It is especially suited for thermoformed applications, as it maintains its clarity, DOI, and high gloss through the thermoforming process. POLYTROPE STR 3570EU-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 to provide an economical solution to produce high gloss appearance parts in HMWPE.

General

Features	• Chemical Resistant • Durable • Good Scratch Resistance	• High Clarity • Low Temperature Impact Resistance • Recyclable Material	• Stain Resistant • Stress Whitening Resistant • Weather Resistant
Forms	• Pellets		
Processing Method	• Coextrusion • Extrusion	• Profile Extrusion • Sheet Extrusion	• Thermoforming

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density / Specific Gravity ¹	0.930	0.928 g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (230°C/2.16 kg)	0.79 g/10 min	0.79 g/10 min	ISO 1133
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Stress ² (Yield, 73°F (23°C))	2400 psi	16.5 MPa	ISO 527-2
Tensile Strain ² (Break, 451°F (233°C))	250 %	250 %	ISO 527-2
Flexural Modulus - Chord ³ (73°F (23°C))	55000 psi	379 MPa	ISO 178
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Instrumented Dart Impact -22°F (-30°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	130 °F	54.4 °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	50 to 70	50 to 70	ISO 2813

Notes

¹ Method A

² Type 1, 2.0 in/min (50 mm/min)

³ Type 1A, 0.079 in/min (2.0 mm/min)

Notes

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