TRINSEO™

STYRON™ C-TECH
High Impact Polystyrene Resin

Overview

STYRON C-TECH™ is a specialty medium impact polystyrene resin that offers excellent gloss. Upon orientation it develops good transparency. Typical uses include blending with GPPS for the production of transparent thermoformed cups, impact modifier for the production of OPS sheet or gloss cap layer for coextruded sheet structures.

Main Characteristics:
- High clarity and good mechanical properties after orientation (e.g. thermoforming)
- Excellent gloss
- High heat resistance
- High Flow
- Easy processing

Applications:
- Transparent thermoformed food containers
- Impact modifier for Oriented Polystyrene (OPS) sheet
- Gloss cap layer for coextruded structures

Complies with:
- Europe Regulation (EC) 10/2011
- U.S. FDA 21 CFR 177.1640
- Consult the regulations for complete details.

Physical	Nominal Value	(English)	Nominal Value	(SI)	Test Method
Density	1.04	g/cm³	1.04	g/cm³	ISO 1183
Apparent (Bulk) Density	0.60	g/cm³	0.60	g/cm³	ISO 60
Melt Mass-Flow Rate (MFR) (200°C/5.0 kg)	6.3	g/10 min	6.3	g/10 min	ISO 1133
Mechanical	**Nominal Value**	**(English)**	**Nominal Value**	**(SI)**	**Test Method**
Tensile Modulus	392000	psi	2700	MPa	ISO 527-1/1
Tensile Stress					ISO 527-2/5
Yield	4790	psi	33.0	MPa	
Break	3920	psi	27.0	MPa	
Tensile Strain (Break)	20	%	20	%	ISO 527-2/5
Flexural Modulus	377000	psi	2600	MPa	ISO 178
Flexural Stress	8700	psi	60.0	MPa	ISO 178
Impact	**Nominal Value**	**(English)**	**Nominal Value**	**(SI)**	**Test Method**
Notched Izod Impact Strength	1.9	ft·lb/in²	4.0	kJ/m²	ISO 180/1A
Thermal	**Nominal Value**	**(English)**	**Nominal Value**	**(SI)**	**Test Method**
Deflection Temperature Under Load					
66 psi (0.45 MPa), Unannealed	180	°F	82.0	°C	ISO 75-2/B
264 psi (1.8 MPa), Unannealed	156	°F	69.0	°C	ISO 75-2/A
Vicat Softening Temperature	212	°F	100	°C	ISO 306/A120
Flammability	**Nominal Value**	**(English)**	**Nominal Value**	**(SI)**	**Test Method**
Flame Rating [1] (0.04 in (1.0 mm))	HB		HB		UL 94

Additional Information

Mass balance versions (bio-based (BIO) or chemically recycled (CR)) of this product are chemically and physically indistinguishable to the standard fossil grade. This technical data sheet applies to all versions. Letters of sameness are available upon request.