TRINSEO™

STYRON A-TECH™ 1300
Polystyrene Resin

Overview

STYRON A-TECH™ 1300 advanced technology polystyrene resin is a high impact polystyrene resin offering excellent toughness and strength with good processability.

Main Characteristics:

- Excellent toughness
- High strength
- Easy processing
- Gas-assist molding
- High heat

Applications:

- TV
- Printers
- Audio enclosures
- Small appliances

Complies with:

- U.S. FDA 21 CFR 177.1640
- Consult the regulation for complete details.

Physical	Nominal Value	(English)	Nominal Value	(SI)	Test Method
Density	1.04	g/cm³	1.04	g/cm³	ASTM D792
Melt Mass-Flow Rate (MFR) (200°C/5.0 kg)	4.5	g/10 min	4.5	g/10 min	ASTM D1238
Mechanical	**Nominal Value**	**(English)**	**Nominal Value**	**(SI)**	**Test Method**
Tensile Strength [1]					ASTM D638
Yield, Injection Molded	4060	psi	28.0	MPa	
Break, Injection Molded	4060	psi	28.0	MPa	
Tensile Elongation [1] (Break, Injection Molded)	50	%	50	%	ASTM D638
Flexural Modulus (Injection Molded)	291000	psi	2010	MPa	ASTM D790
Flexural Strength (Injection Molded)	7250	psi	50.0	MPa	ASTM D790
Impact	**Nominal Value**	**(English)**	**Nominal Value**	**(SI)**	**Test Method**
Notched Izod Impact					ASTM D256
73°F (23°C), Injection Molded	2.4	ft·lb/in	130	J/m	
Thermal	**Nominal Value**	**(English)**	**Nominal Value**	**(SI)**	**Test Method**
Deflection Temperature Under Load					ASTM D648
264 psi (1.8 MPa), Unannealed	163	°F	73.0	°C	
264 psi (1.8 MPa), Annealed	199	°F	93.0	°C	
Vicat Softening Temperature	221	°F	105	°C	ASTM D1525 [2]
Flammability	**Nominal Value**	**(English)**	**Nominal Value**	**(SI)**	**Test Method**
Flame Rating [3] (0.06 in (1.5 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.