TRINSEO™

STYRON A-TECH™ 1210
High Impact Polystyrene Resin

Overview

STYRON A-TECH™ 1210 is a newly developed high impact polystyrene (HIPS) resin based on patented technology, offering a unique combination of processability, stiffness, toughness, low gloss and surface smoothness.

Main Characteristics:

- Low gloss and smooth sheet surface
- Ease of processing
- Excellent thermoforming behaviour
- Good blendability with GPPS

Applications:

- Form Fill Seal (FFS) dairy packaging
- Medical device packaging
- Signage sheet
- Sheet applications requiring matt and smooth surface

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)	3.4	g/10 min	3.4	g/10 min	ISO 1133
Mechanical	**Nominal Value**	**(English)**	**Nominal Value**	**(SI)**	**Test Method**
Tensile Modulus	254000	psi	1750	MPa	ISO 527-1/1
Tensile Stress					ISO 527-2/5
Yield	2760	psi	19.0	MPa	
Break	3190	psi	22.0	MPa	
Tensile Strain (Break)	65	%	65	%	ISO 527-2/5
Flexural Modulus	283000	psi	1950	MPa	ISO 178
Flexural Stress	5510	psi	38.0	MPa	ISO 178
Impact	**Nominal Value**	**(English)**	**Nominal Value**	**(SI)**	**Test Method**
Notched Izod Impact Strength	6.2	ft·lb/in²	13	kJ/m²	ISO 180/1A
Thermal	**Nominal Value**	**(English)**	**Nominal Value**	**(SI)**	**Test Method**
Deflection Temperature Under Load					ISO 75-2/A
264 psi (1.8 MPa), Unannealed	165	°F	74.0	°C	
Vicat Softening Temperature	210	°F	99.0	°C	ISO 306/A120

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.