TRINSEO™

MAGNUM™ A290X
ABS Resin

Overview

MAGNUM™ A290X is a super high impact ABS resins that can be processed by injection molding and extrusion/ thermoforming. It is specially designed for applications with stringent requirement on material toughness. Its stable light base color makes it an ideal candidate for self-coloring process.

Complies with
- U.S. FDA FCN 1525
- Consult the regulation for complete details

Applications:
- Transportation
- Protective covers
- Vehicle interior trim
- Luggage

Physical	Nominal Value	(English)	Nominal Value	(SI)	Test Method
Density	1.05	g/cm³	1.05	g/cm³	ISO 1183
Melt Mass-Flow Rate (MFR) (220°C/10.0 kg)	4.0	g/10 min	4.0	g/10 min	ISO 1133
Mechanical	**Nominal Value**	**(English)**	**Nominal Value**	**(SI)**	**Test Method**
Tensile Strength					
Yield [1]	5660	psi	39.0	MPa	ASTM D638
Yield	5080	psi	35.0	MPa	ISO 527-2/50
Break [1]	4210	psi	29.0	MPa	ASTM D638
Break	3920	psi	27.0	MPa	ISO 527-2/50
Tensile Elongation					
Break [1]	30	%	30	%	ASTM D638
Break	35	%	35	%	ISO 527-2/50
Flexural Modulus [2]	290000	psi	2000	MPa	ASTM D790
Flexural Strength [2]	8700	psi	60.0	MPa	ASTM D790
Impact	**Nominal Value**	**(English)**	**Nominal Value**	**(SI)**	**Test Method**
Charpy Notched Impact Strength (73°F (23°C))	19	ft·lb/in²	40	kJ/m²	ISO 179/1eA
Notched Izod Impact (73°F (23°C))	11	ft·lb/in	600	J/m	ASTM D256
Thermal	**Nominal Value**	**(English)**	**Nominal Value**	**(SI)**	**Test Method**
Deflection Temperature Under Load					ASTM D648
264 psi (1.8 MPa), Annealed	199	°F	93.0	°C	
Vicat Softening Temperature	203	°F	95.0	°C	ISO 306/B50
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.

Injection	Nominal Value	(English)	Nominal Value	(SI)
Drying Temperature	176 to 194	°F	80 to 90	°C
Drying Time	2.0 to 4.0	hr	2.0 to 4.0	hr