

Technical Information



MAGNUM™ CO2NET™ A290XBIO80 ABS Resin

Overview

MAGNUM™ CO2NET™ A290XBIO80 ABS is credited with up to 80% of ISCC+ bio-based feedstocks through mass balance certification. It 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
- ISCC+
- 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/cm ³	1.05 g/cm ³	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/in ²	40 kJ/m ²	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
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	

Notes

These are typical properties only and are not to be construed as specifications. Users should confirm results by their own tests.

¹ 2.0 in/min (50 mm/min)

² 0.051 in/min (1.3 mm/min)

³ This rating not intended to reflect hazards presented by this or any other material under actual fire conditions.

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