

Technical Information



MAGNUM™ CO2NET™ A371BIO80 ABS Resin

Overview

MAGNUM™ CO2NET™ A371BIO80 ABS is credited with 80% of ISCC+ bio-based feedstocks through mass balance certification. MAGNUM™ CO2NET™ A371BIO80 combines high impact and good processability. It is designed for injection molding and extrusion applications. Its stable light base color makes it an ideal candidate for self-coloring process.

Complies with

- U.S. FDA 21 CFR 181.32(a)(3)(i)
- ISCC+
- Consult the regulation for complete details

- Applications:

- Extrusion sheets
- Profiles
- General injection molding

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)	8.5 g/10 min	8.5 g/10 min	ISO 1133
Molding Shrinkage	4.0E-3 to 7.0E-3 in/in	0.40 to 0.70 %	ISO 294-4
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Strength			
Yield ¹	5950 psi	41.0 MPa	ASTM D638
Yield	6380 psi	44.0 MPa	ISO 527-2/50
Break ¹	4640 psi	32.0 MPa	ASTM D638
Break	4640 psi	32.0 MPa	ISO 527-2/50
Tensile Elongation			
Break ¹	15 %	15 %	ASTM D638
Break	10 %	10 %	ISO 527-2/50
Flexural Modulus ²	319000 psi	2200 MPa	ASTM D790
Flexural Strength ²	10200 psi	70.0 MPa	ASTM D790
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Charpy Notched Impact Strength (73°F (23°C))	11 ft·lb/in ²	23 kJ/m ²	ISO 179/1eA
Notched Izod Impact (73°F (23°C))	6.0 ft·lb/in	320 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	207 °F	97.0 °C	
Vicat Softening Temperature	214 °F	101 °C	ISO 306/B50
Flammability	Nominal Value (English)	Nominal Value (SI)	Test Method
Flame Rating ³			UL 94
0.06 in (1.5 mm)	HB	HB	
0.12 in (3.0 mm)	HB	HB	
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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