

MAGNUM™ 3453 ABS Resin

Overview

MAGNUM™ M3453 CO2NET™ BIO80 ABS is a general purpose injection moulding resin suitable for a wide range of applications. The product combines a medium to high impact performance with good flowability. The mass (continuous process) ABS technology ensures an ABS resin that combines excellent processability with a stable light base colour that is ideal for self-colouring.

Applications:

- Household appliances
- Telephones
- Electrical and computer equipment
- Consumer goods
- Toys

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	1.05 g/cm ³	1.05 g/cm ³	ISO 1183
Apparent (Bulk) Density	0.65 g/cm ³	0.65 g/cm ³	ISO 60
Melt Mass-Flow Rate (MFR) (220°C/10.0 kg)	15 g/10 min	15 g/10 min	ISO 1133
Molding Shrinkage	4.0E-3 to 7.0E-3 in/in	0.40 to 0.70 %	ISO 294-4
VOC Content	25.0 µg/g	25.0 µg/g	VDA 277
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Modulus	331000 psi	2280 MPa	ISO 527-1/1
Tensile Stress (Yield)	6530 psi	45.0 MPa	ISO 527-2/50
Tensile Strain (Yield)	2.5 %	2.5 %	ISO 527-2/50
Flexural Modulus ¹	334000 psi	2300 MPa	ISO 178
Flexural Stress ¹	9860 psi	68.0 MPa	ISO 178
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Charpy Notched Impact Strength 73°F (23°C), Injection Molded	8.6 ft-lb/in ²	18 kJ/m ²	ISO 179/1eA
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load 264 psi (1.8 MPa), Annealed	212 °F	100 °C	ISO 75-2/A
Vicat Softening Temperature	207 °F	97.0 °C	ISO 306/B50
Flammability	Nominal Value (English)	Nominal Value (SI)	Test Method
Flame Rating ²			UL 94
0.06 in (1.5 mm)	HB	HB	
0.12 in (3.0 mm)	HB	HB	
Additional Information	Nominal Value (English)	Nominal Value (SI)	Test Method
Fogging ²	97 %	97 %	ISO 6452
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	