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/cm³	1.05	g/cm³	ISO 1183
Apparent (Bulk) Density	0.65	g/cm³	0.65	g/cm³	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					ISO 179/1eA
73°F (23°C), Injection Molded	8.6	ft·lb/in²	18	kJ/m²	
Thermal	**Nominal Value (English)**		**Nominal Value (SI)**		**Test Method**
Deflection Temperature Under Load					ISO 75-2/A
264 psi (1.8 MPa), Annealed	212	°F	100	°C	
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

Notes

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

[1] 0.079 in/min (2.0 mm/min)

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

Form No. 500-00057033en

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