



MAGNUM™ 3453

Trinseo - ABS Resin

Sunday, November 3, 2019

General Information

Product Description

MAGNUM® 3453 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

General

Material Status	• Commercial: Active
Availability	• Asia Pacific • Europe • North America
Features	• Good Flow • Good Processability • High Impact Resistance
Uses	• Appliances • General Purpose • Electrical/Electronic Applications • Toys
Forms	• Pellets

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.05	g/cm ³	ISO 1183/B
Apparent (Bulk) Density	0.65	g/cm ³	ISO 60
Melt Mass-Flow Rate (MFR)			ISO 1133
220°C/10.0 kg	15	g/10 min	
230°C/3.8 kg	5.0	g/10 min	
Molding Shrinkage - Flow	0.40 to 0.70	%	ISO 294-4
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus (0.126 in, Injection Molded)	331000	psi	ISO 527-2
Tensile Stress (Yield, 0.126 in, Injection Molded)	6530	psi	ISO 527-2/50
Tensile Strain (Yield, 0.126 in, Injection Molded)	2.5	%	ISO 527-2/50
Flexural Modulus ^{2, 3} (0.126 in, Injection Molded)	334000	psi	ISO 178
Flexural Stress ^{2, 3} (0.126 in, Injection Molded)	9860	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
-22°F, Injection Molded	4.8	ft-lb/in ²	
73°F, Injection Molded	9.5	ft-lb/in ²	
Notched Izod Impact Strength			ISO 180/A
-22°F, Injection Molded	4.3	ft-lb/in ²	
73°F, Injection Molded	9.0	ft-lb/in ²	
Thermal	Nominal Value	Unit	Test Method
Heat Deflection Temperature (264 psi, Annealed)	212	°F	ISO 75-2/A

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Thermal	Nominal Value	Unit	Test Method
Vicat Softening Temperature	207	°F	ISO 306/B50
Flammability	Nominal Value	Unit	Test Method
Burning Rate ⁴ (0.0787 in)	2.2	in/min	ISO 3795
Flame Rating ⁴			UL 94
0.06 in	HB		
0.12 in	HB		
Carbon Emission ⁴	25.0	µg/g	VDA 277
Fogging ⁴	97	%	ISO 294-4

Notes

¹ Typical properties: these are not to be construed as specifications.

² 0.079 in/min

³ 3-points

⁴ This rating not intended to reflect hazards presented by this or any other material under actual fire conditions.