



MAGNUM™ 3504

Trinseo - ABS Resin

Sunday, November 3, 2019

General Information

Product Description

MAGNUM® 3504 is a general purpose resin and can be used for both injection moulding and extrusion applications. This grade combines high impact with medium-high heat resistance. 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:

- General purpose extrusion and injection moulding applications

General

Material Status	• Commercial: Active		
Availability	• Asia Pacific • Europe	• Latin America • North America	
Features	• Good Processability	• High Heat Resistance	• High Impact Resistance
Uses	• General Purpose		
Forms	• Pellets		
Processing Method	• Injection Molding	• Profile Extrusion	• Sheet Extrusion

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) (220°C/10.0 kg)	5.2	g/10 min	ISO 1133
Melt Volume-Flow Rate (MVR) (220°C/10.0 kg)	5.30	cm ³ /10min	ISO 1133
Molding Shrinkage - Flow	0.40 to 0.70	%	ISO 294-4
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus (0.126 in, Injection Molded)	310000	psi	ISO 527-2
Tensile Stress (Yield, 0.126 in, Injection Molded)	6240	psi	ISO 527-2/50
Tensile Strain (Yield, 0.126 in, Injection Molded)	2.7	%	ISO 527-2/50
Flexural Modulus ^{2, 3} (0.126 in, Injection Molded)	297000	psi	ISO 178
Flexural Stress ^{2, 3} (0.126 in, Injection Molded)	9430	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength			
-22°F, Injection Molded	6.2	ft-lb/in ²	ISO 179/1eA
-22°F, Injection Molded	4.3	ft-lb/in ²	ISO 179/2C
73°F, Injection Molded	11	ft-lb/in ²	ISO 179/1eA
73°F, Injection Molded	7.1	ft-lb/in ²	ISO 179/2C
Notched Izod Impact Strength			ISO 180/1A
-22°F, Injection Molded	5.7	ft-lb/in ²	
73°F, Injection Molded	12	ft-lb/in ²	
Thermal	Nominal Value	Unit	Test Method
Heat Deflection Temperature (264 psi, Annealed)	214	°F	ISO 75-2/A
Vicat Softening Temperature	216	°F	ISO 306/B50

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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	30.0	µg/g	VDA 277
Fogging ⁴	98	%	ISO 6452

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.