

# MAGNUM™ 3504

## ABS Resin

### Overview

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

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	1.05 g/cm <sup>3</sup>	1.05 g/cm <sup>3</sup>	ISO 1183
Apparent (Bulk) Density	0.65 g/cm <sup>3</sup>	0.65 g/cm <sup>3</sup>	ISO 60
Melt Mass-Flow Rate (MFR) (220°C/10.0 kg)	5.2 g/10 min	5.2 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	30.0 µg/g	30.0 µg/g	VDA 277
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Modulus	310000 psi	2140 MPa	ISO 527-1/1
Tensile Stress (Yield)	6240 psi	43.0 MPa	ISO 527-2/50
Tensile Strain (Yield)	2.7 %	2.7 %	ISO 527-2/50
Flexural Modulus <sup>1</sup>	297000 psi	2050 MPa	ISO 178
Flexural Stress <sup>1</sup>	9430 psi	65.0 MPa	ISO 178
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Charpy Notched Impact Strength 73°F (23°C), Injection Molded	11 ft-lb/in <sup>2</sup>	23 kJ/m <sup>2</sup>	ISO 179/1eA
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load 264 psi (1.8 MPa), Annealed	214 °F	101 °C	ISO 75-2/A
Vicat Softening Temperature	216 °F	102 °C	ISO 306/B50
Flammability	Nominal Value (English)	Nominal Value (SI)	Test Method
Flame Rating <sup>2</sup>			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	98 %	98 %	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	