



MAGNUM™ 3416NA

Trinseo - ABS Resin

Sunday, November 3, 2019

General Information

Product Description

High Heat, Low Gloss ABS resin with good practical toughness for injection molded automotive interior applications.

Applications:

- Door panels, Floor consoles, Instrument Panel & Sidewall trim parts.

General

Material Status	• Commercial: Active		
Availability	• Latin America	• North America	
Features	• Good Toughness	• High Heat Resistance	• Low Gloss
Uses	• Automotive Applications • Automotive Instrument Panel	• Automotive Interior Parts • Automotive Interior Trim	
Forms	• Pellets		
Processing Method	• Injection Molding		

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.05	g/cm ³	ISO 1183
Apparent (Bulk) Density	0.66	g/cm ³	ISO 60
Melt Mass-Flow Rate (MFR)			ISO 1133
220°C/10.0 kg	8.0	g/10 min	
230°C/3.8 kg	2.6	g/10 min	
Molding Shrinkage			ISO 294-4
Across Flow	0.55	%	
Flow	0.60	%	
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	316000	psi	ISO 527-2/1
Tensile Stress (Yield)	6240	psi	ISO 527-2/50
Tensile Strain (Yield)	3.0	%	ISO 527-2/50
Flexural Modulus ^{2, 3}	328000	psi	ISO 178
Flexural Stress ^{2, 3}	9570	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
-22°F	5.2	ft-lb/in ²	
73°F	8.6	ft-lb/in ²	
Notched Izod Impact Strength			ISO 180/A
-22°F	5.7	ft-lb/in ²	
73°F	9.5	ft-lb/in ²	
Thermal	Nominal Value	Unit	Test Method
Heat Deflection Temperature (264 psi, Unannealed)	185	°F	ISO 75-2/A
Vicat Softening Temperature	225	°F	ISO 306/B50
Flammability	Nominal Value	Unit	Test Method
Burning Rate ⁴ (0.0787 in)	0.98	in/min	ISO 3795
Carbon Emission ⁴	10.0	µg/g	VDA 277

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Flammability	Nominal Value	Unit	Test Method
Fogging ⁴ (212°F)	94	%	ISO 6452

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	185	°F
Drying Time	3.0 to 4.0	hr
Rear Temperature	469	°F
Middle Temperature	489	°F
Front Temperature	500	°F
Nozzle Temperature	489	°F
Processing (Melt) Temp	489 to 520	°F
Mold Temperature	100 to 140	°F

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.