

Technical Information



PLEXIGLAS® MI7C-56503RB

Overview

Plexiglas® MI7C-56503RB is an impact modified thermoplastic acrylic resin formulated for injection molding. It is a jet black, high gloss, opaque resin that has high heat resistance, high melt flow and provides 7 times the impact resistance of standard acrylics while maintaining excellent optical properties. It offers an excellent balance between melt flow and increased resistance to breakage, while providing weatherability superior to that provided by other high-impact plastics. Moldflow simulation data is available.

Automotive Specifications

- CHRYSLER MS-DB-16 CPN3468
- CHRYSLER MS-DB-75 CPN4236
- FORD WSB-M4D687-A
- GM GMP.PMMA.015
- GM GMW16335P-PMMA-T4

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	1.17 g/cm ³	1.17 g/cm ³	ASTM D792
Melt Mass-Flow Rate (MFR) (230°C/3.8 kg)	1.8 g/10 min	1.8 g/10 min	ASTM D1238
Molding Shrinkage - Flow	3.0E-3 to 6.0E-3 in/in	0.30 to 0.60 %	ASTM D955
Water Absorption (24 hr)	0.30 %	0.30 %	ASTM D570
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Modulus	350000 psi	2410 MPa	ASTM D638
Tensile Strength (Break)	7500 psi	51.7 MPa	ASTM D638
Tensile Elongation (Break)	35 %	35 %	ASTM D638
Flexural Modulus	350000 psi	2410 MPa	ASTM D790
Flexural Strength (Yield)	12000 psi	82.7 MPa	ASTM D790
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Notched Izod Impact (73°F (23°C))	0.60 ft-lb/in	32 J/m	ASTM D256
Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Rockwell Hardness (M-Scale)	70	70	ASTM D785
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load ¹			ASTM D648
66 psi (0.45 MPa), Annealed	212 °F	100 °C	
264 psi (1.8 MPa), Annealed	203 °F	95.0 °C	
Vicat Softening Temperature			
--	226 °F	108 °C	ASTM D1525 ²
--	205 °F	96.1 °C	ASTM D1525 ³
Thermal Conductivity	1.4 Btu-in/hr/ft ² /°F	0.20 W/m/K	ASTM C177
Flammability	Nominal Value (English)	Nominal Value (SI)	Test Method
Flame Rating	HB	HB	UL 94
Additional Information	Nominal Value (English)	Nominal Value (SI)	Test Method
ASTM Classification	PMMA 0241V3	PMMA 0241V3	ASTM D788

Notes

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

¹ Annealing cycle: 4hrs @ 176°F

² Rate A (50°C/h), Loading 1 (10 N)

³ Rate A (50°C/h), Loading 2 (50 N)

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