

Technical Information



PLEXIGLAS® GT3

Overview

PLEXIGLAS® GT3 is a specialty grade thermoplastic acrylic resin formulated primarily for coextrusion and thermoforming, where maximum gloss retention is desired.

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	1.18 g/cm ³	1.18 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
Water Absorption (24 hr)	0.40 %	0.40 %	ASTM D570
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Modulus	445000 psi	3070 MPa	ASTM D638
Tensile Strength (Yield)	8900 psi	61.4 MPa	ASTM D638
Tensile Elongation (Break)	18 %	18 %	ASTM D638
Flexural Modulus	400000 psi	2760 MPa	ASTM D790
Flexural Strength (Yield)	14500 psi	100 MPa	ASTM D790
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Notched Izod Impact	0.40 ft-lb/in	21 J/m	ASTM D256
Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Rockwell Hardness (M-Scale)	80	80	ASTM D785
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load ¹			ASTM D648
66 psi (0.45 MPa), Annealed	200 °F	93.3 °C	
264 psi (1.8 MPa), Annealed	191 °F	88.3 °C	
Vicat Softening Temperature			
--	223 °F	106 °C	ASTM D1525 ²
--	210 °F	98.9 °C	ASTM D1525 ³
Thermal Conductivity	1.5 Btu-in/hr/ft ² /°F	0.22 W/m/K	ASTM C177
Optical	Nominal Value (English)	Nominal Value (SI)	Test Method
Light Transmittance (125.0 mil (3175 µm))	92.0 %	92.0 %	ASTM D1003
Haze (125.0 mil (3175 µm))	< 2.00 %	< 2.00 %	ASTM D1003

Extrusion Notes

Recommended Drying Conditions: 180 °F (82 °C) for a minimum of 4 hours at -40°F (-40°C) dew point or < 0.06% moisture content.

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: 4 hours at 176 °F (80 °C)

² Rate A (50°C/h), Loading 1 (10 N)

³ Rate A (50°C/h), Loading 2 (50 N)

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