

Technical Information



PLEXIGLAS® V825T

Overview

Plexiglas® V825T is a thermoplastic acrylic resin formulated for injection molding applications. It is characterized by its high heat resistance and excellent melt flow., and typically used for instrument cluster lenses, light guides, thick optics, and exterior rear combination lenses.

Automotive Specifications

- FORD WSS-M4D776-B1
- FORD WSS-M4D776-B2
- GM GMW16335P-PMMA-T2HF

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	1.19 g/cm ³	1.19 g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (230°C/3.8 kg)	3.5 g/10 min	3.5 g/10 min	ISO 1133
Melt Volume-Flow Rate (MVR) (230°C/3.8 kg)	3.4 cm ³ /10min	3.4 cm ³ /10min	ISO 1133
Molding Shrinkage	2.0E-3 to 6.0E-3 in/in	0.20 to 0.60 %	ISO 294-4
Water Absorption (24 hr, 73°F (23°C))	0.30 %	0.30 %	ISO 62
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Modulus	479000 psi	3300 MPa	ISO 527-1/1A/1
Tensile Stress			ISO 527-2/1A/5
Yield	10200 psi	70.0 MPa	
Break	10200 psi	70.0 MPa	
Tensile Strain			ISO 527-2/1A/5
Yield	5.0 %	5.0 %	
Break	5.0 %	5.0 %	
Flexural Modulus	464000 psi	3200 MPa	ISO 178/A
Flexural Stress ¹	13800 psi	95.0 MPa	ISO 178
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Charpy Notched Impact Strength	0.95 ft-lb/in ²	2.0 kJ/m ²	ISO 179/1eA
Charpy Unnotched Impact Strength	9.5 ft-lb/in ²	20 kJ/m ²	ISO 179/1eU
Notched Izod Impact Strength	0.95 ft-lb/in ²	2.0 kJ/m ²	ISO 180/A
Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Rockwell Hardness (M-Scale)	97	97	ISO 2039-2
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load			
66 psi (0.45 MPa), Annealed	219 °F	104 °C	ISO 75-2/B
264 psi (1.8 MPa), Annealed	210 °F	99.0 °C	ISO 75-2/A
Vicat Softening Temperature			
--	223 °F	106 °C	ISO 306/B50
--	235 °F	113 °C	ISO 306/A50
Flammability	Nominal Value (English)	Nominal Value (SI)	Test Method
Flame Rating	HB	HB	UL 94
Optical	Nominal Value (English)	Nominal Value (SI)	Test Method
Refractive Index ²	1.490	1.490	ISO 489
Light Transmittance (125.0 mil (3175 µm))	92.0 %	92.0 %	ASTM D1003
Haze (125.0 mil (3175 µm))	< 1.00 %	< 1.00 %	ASTM D1003

Notes

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

¹ Conventional Deflection

² Nd @ 23°C

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