



Weatherguard® WG 8100 Series

Teknor Apex Company - Polymethyl Methacrylate Acrylic

General Information

General			
Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Latin America • North America	
Features	• Good Weather Resistance • High Flow • High Gloss	• Low Flow • Low Gloss • Low Heat Build-up	• Medium Flow • Medium Gloss • UV Stabilized
Uses	• Building Materials • Capstock • Cladding Capstock	• Decking Capstock • Fencing & Decking • Railing Capstock	• Siding Capstock
Regulatory Statement	• Due to the frequent updates to regulations, specifically, California Proposition 65, EU REACH SVHCs, and RoHS, please contact Teknor Apex for the most up to date compliance statement, or refer to section 15 of the product SDS.		
Forms	• Pellets		
Processing Method	• Extrusion		

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.15		ASTM D792
Melt Mass-Flow Rate (MFR) (190°C/21.6 kg)	8.5	g/10 min	ASTM D1238
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus ² (73°F, 0.125 in, Injection Molded)	291000	psi	ASTM D638
Tensile Strength ²			ASTM D638
Yield, 73°F, 0.125 in, Injection Molded	5470	psi	
Tensile Elongation ²			ASTM D638
Yield, 73°F, 0.125 in, Injection Molded	38	%	
Flexural Modulus ³ (73°F, 0.125 in, Injection Molded)	302000	psi	ASTM D790
Flexural Strength ³ (73°F, 0.125 in, Injection Molded)	8810	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F, 0.125 in, Injection Molded)	0.67	ft-lb/in	ASTM D256
Drop Impact Resistance			ASTM D4226
0.125 in ⁴	0.120	in-lb/mil	
0.125 in ⁵	0.650	in-lb/mil	
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale, 0.250 in)	100		ASTM D785
Durometer Hardness			ASTM D2240
Shore D, 10 sec, Operating Stand, Compression Molded	75		
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			ASTM D648
264 psi, Annealed, 0.125 in, Injection Molded	183	°F	
Vicat Softening Temperature	182	°F	ASTM D1525 ⁶
CLTE - Flow (-40 to 104°F, 0.236 in)	6.3E-5	in/in/°F	ASTM E831
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.13 in, Exceeded 25mm)	HB		UL 94

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Additional Information

Data Sheet Applies to ALL Colors in WG 8000 and 8100 Series.

10/21-cw

Notes

¹ Typical properties: these are not to be construed as specifications.

² Type I, 0.20 in/min

³ 0.050 in/min

⁴ Procedure A

⁵ Procedure B

⁶ Rate A (50°C/h), Loading 1 (10 N)