

GEON® Rigid 6603 (f1)

GEON Performance Solutions - Rigid Polyvinyl Chloride

Tuesday, June 18, 2024

General Information

Product Description

Novablend 6603 is a high impact, medium flow, opaque, injection molding compound. Novablend 6603 compound is designed to process easily with excellent weld line and electrical properties. These compounds can be modified to enhance UV stability for outdoor or interior applications.

General

Material Status	• Commercial: Active
Availability	• North America
Additive	• Impact Modifier
Features	• Impact Modified
Uses	• Outdoor Applications
Agency Ratings	• UL f1
Appearance	• Opaque
Forms	• Pellets
Processing Method	• Injection Molding

ASTM & ISO Properties ¹

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density / Specific Gravity	1.34	1.34	ASTM D792
Molding Shrinkage - Flow	2.0E-3 to 5.0E-3 in/in	0.20 to 0.50 %	ASTM D955
Outdoor Suitability	f1	f1	UL 746C
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Modulus ²	400000 psi	2760 MPa	ASTM D638
Tensile Strength	6000 psi	41.4 MPa	ASTM D638
Flexural Modulus	420000 psi	2900 MPa	ASTM D790
Flexural Strength	11800 psi	81.4 MPa	ASTM D790
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Notched Izod Impact			ASTM D256A
73°F (23°C), 0.125 in (3.18 mm), Injection Molded	17 ft-lb/in	910 J/m	
Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Durometer Hardness (Shore D, 15 sec)	79	79	ASTM D2240
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load			ASTM D648
264 psi (1.8 MPa), Annealed, 0.125 in (3.18 mm)	156 °F	68.6 °C	
RTI Elec (0.06 in (1.5 mm))	221 °F	105 °C	UL 746B
RTI Imp (0.06 in (1.5 mm))	221 °F	105 °C	UL 746B
RTI Str (0.06 in (1.5 mm))	221 °F	105 °C	UL 746B
Electrical	Nominal Value (English)	Nominal Value (SI)	Test Method
Volume Resistivity	15 ohms-cm	15 ohms-cm	IEC 60093
Dielectric Strength	460 V/mil	18 kV/mm	ASTM D149

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Flammability	Nominal Value (English)	Nominal Value (SI)	Test Method
Flame Rating (0.06 in (1.5 mm), All)	V-0 5VA	V-0 5VA	UL 94 IEC 60695-11-10, -20

Processing Information			
Injection	Nominal Value (English)	Nominal Value (SI)	
Processing (Melt) Temp	390 to 405 °F	199 to 207 °C	

Notes

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

² Type I

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