

PolyOneTM

RMS-04

GeonTM Vinyl Rigid Extrusion 8700A

Rigid Polyvinyl Chloride

Key Characteristics

General			
Material Status	• Commercial: Active		
Regional Availability	• Africa & Middle East • Asia Pacific	• Europe • North America	• South America
Features	• General Purpose	• Good Dimensional Stability	• Good Melt Strength
Uses	• Automotive Applications • Beltline Moldings	• General Purpose • Profiles	
Agency Ratings	• NSF 51	• NSF 61	
Automotive Specifications	• CHRYSLER MS-DC28 Type B CPN2647 Color: Black	• GM GM7001M (PVC)	
Forms	• Pellets		
Processing Method	• Extrusion		

Technical Properties ¹

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Specific Gravity	1.38	1.38 g/cm ³	ASTM D792
PVC Cell Classification	16344	16344	ASTM D1784
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Modulus ²	390000 psi	2690 MPa	ASTM D638
Tensile Strength ² (Yield)	6200 psi	42.7 MPa	ASTM D638
Flexural Modulus	380000 psi	2620 MPa	ASTM D790
Flexural Strength	11000 psi	75.8 MPa	ASTM D790
Compressive Strength	8100 psi	55.8 MPa	ASTM D695
Impact	Typical Value (English)	Typical Value (SI)	Test Method
Notched Izod Impact			ASTM D256A
0°F (-18°C), 0.125 in (3.18 mm), Compression Molded	1.10 ft-lb/in	58.7 J/m	
32°F (0°C), 0.125 in (3.18 mm), Compression Molded	1.60 ft-lb/in	85.4 J/m	
73°F (23°C), 0.125 in (3.18 mm), Compression Molded	17.0 ft-lb/in	907 J/m	
Drop Impact Resistance			ASTM D4226
73°F (23°C) ³	0.800 in-lb/mil	35.6 J/cm	
73°F (23°C) ⁴	0.800 in-lb/mil	35.6 J/cm	
Hardness	Typical Value (English)	Typical Value (SI)	Test Method
Rockwell Hardness (R-Scale)	111	111	ASTM D785
Durometer Hardness (Shore D, 15 sec)	78	78	ASTM D2240
Thermal	Typical Value (English)	Typical Value (SI)	Test Method
Deflection Temperature Under Load 264 psi (1.8 MPa), Unannealed, 0.125 in (3.18 mm)	163 °F	72.8 °C	ASTM D648
CLTE - Flow	0.000037 in/in/°F	0.000067 cm/cm/°C	ASTM D696
Electrical	Typical Value (English)	Typical Value (SI)	Test Method
Dielectric Strength	690 V/mil	27 kV/mm	ASTM D149

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B.W. 6/15/10

Geon™ Vinyl Rigid Extrusion 8700A

Technical Data Sheet

Electrical	Typical Value (English)	Typical Value (SI)	Test Method
Dielectric Constant			ASTM D150
60 Hz	3,90	3,90	
1 kHz	3,30	3,30	
Dissipation Factor ⁵			ASTM D150
86°F (30°C), 60 Hz	0,029	0,029	
86°F (30°C), 1 kHz	0,040	0,040	
Flammability	Typical Value (English)	Typical Value (SI)	Test Method
Flame Rating - UL			UL 94
0,0280 in (0,711 mm), ALL	V-0	V-0	
0,0591 in (1,50 mm), ALL	5VA	5VA	
CSA Flammability			
34.3 mil (870,0 µm), All Colors	V-0	V-0	
Additional Information	Typical Value (English)	Typical Value (SI)	
Ease of Sizing	Excellent	Excellent	

Note: Automotive OEM approval(s).
Note: NSF listings are obtained on specific colors. Contact PolyOne for the latest listing of approved colors for this product.
Note: The Cell Classification was determined using the notched Izod test with injection molded samples.

Processing Information

Extrusion	Typical Value (English)	Typical Value (SI)
Melt Temperature	355 to 360 °F	179 to 182 °C

Notes

¹ Typical values are not to be construed as specifications.

² Type I, 0.20 in/min (5.1 mm/min)

³ Procedure B, C.125 Dart

⁴ Procedure A, C.125 Dart

⁵ 24 hr

CONTACT INFORMATION

Americas

Argentina - Buenos Aires
+0054 11 4200 5917

Brazil - Piracicaba - SP - Brazil
+55 19 3421 0969

Canada - St Remi de Napierville
+1 450 454 8010

Mexico - Toluca
+52 722 2790200

United States - Avon Lake
+1 440 930 1000

Asia

China - HouJie Town, Dongguan
City,
+ 86 (0) 769 8587 8800

Europe

Belgium - Assesse
+32 (0) 83 660 211

PolyOne

Beyond Polymers.

Better Business Solutions. SM

www.polyone.com

PolyOne Americas

33587 Walker Road
Avon Lake, Ohio 44012
United States
+1 440 930 1000
+1 866 POLYONE

PolyOne Asia

No. 88 Guoshoujing Road
Z.J Hi-tech Park, Pudong
Shanghai, 201203, China
+86 (0) 21 5080 1188

PolyOne Europe

6 Giällewee
Please Call Assesse
Belgium Phone Number +32
(0) 83 660 211

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