



# Geon™ Vinyl Dry Blend E7009

## Rigid Polyvinyl Chloride

### Key Characteristics

#### Product Description

Recommended for whites and light pastel colors only. Not to be used for darker colors.

#### General

Material Status	• Commercial: Active		
Regional Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Good Weather Resistance	• Medium Impact Resistance	
Uses	• Profiles	• Windows & Doors	
Forms	• Powder		
Processing Method	• Extrusion		

### Technical Properties <sup>1</sup>

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Specific Gravity	1.51	1.51	ASTM D792
PVC Cell Classification	1-22434-42-0000	1-22434-42-0000	ASTM D4216
PVC Cell Classification	12364	12364	ASTM D1784
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Modulus <sup>2</sup>	445000 psi	3070 MPa	ASTM D638
Tensile Strength <sup>2</sup> (Yield)	6820 psi	47.0 MPa	ASTM D638
Flexural Modulus	481000 psi	3320 MPa	ASTM D790
Flexural Strength	12200 psi	84.0 MPa	ASTM D790
Impact	Typical Value (English)	Typical Value (SI)	Test Method
Notched Izod Impact 73°F (23°C), 0.125 in (3.18 mm), Compression Molded	1.2 ft·lb/in	64 J/m	ASTM D256A
Drop Impact Resistance 73°F (23°C) <sup>3</sup> 73°F (23°C) <sup>4</sup>	1.68 in·lb/mil 3.18 in·lb/mil	74.7 J/cm 141 J/cm	ASTM D4226
Hardness	Typical Value (English)	Typical Value (SI)	Test Method
Durometer Hardness (Shore D)	80	80	ASTM D2240
Thermal	Typical Value (English)	Typical Value (SI)	Test Method
Deflection Temperature Under Load 66 psi (0.45 MPa), Annealed, 0.125 in (3.18 mm) <sup>5</sup> 66 psi (0.45 MPa), Annealed, 0.125 in (3.18 mm) <sup>6</sup>	173 °F 175 °F	78.3 °C 79.4 °C	ASTM D648
Deflection Temperature Under Load 264 psi (1.8 MPa), Annealed, 0.125 in (3.18 mm), Compression Molded <sup>5</sup> 264 psi (1.8 MPa), Annealed, 0.125 in (3.18 mm), Compression Molded <sup>6</sup>	165 °F 173 °F	73.9 °C 78.3 °C	ASTM D648
CLTE - Flow	3.3E-5 in/in/°F	5.9E-5 cm/cm/°C	ASTM D696

#### Additional Information

Physical properties based on Geon E7009 white 1024 lot# UTCX 57572

Copyright © 2015 PolyOne Corporation. PolyOne makes no representations, guarantees, or warranties of any kind with respect to the Information contained in this document about its accuracy, suitability for particular applications, or the results obtained or obtainable using the information. Some of the Information arises from laboratory work with small-scale equipment which may not provide a reliable indication of performance or properties obtained or obtainable on larger-scale equipment. Values reported as "typical" or stated without a range do not state minimum or maximum properties; consult your sales representative for property ranges and min/max specifications. Processing conditions can cause material properties to shift from the values stated in the Information. PolyOne makes no warranties or guarantees respecting suitability of either PolyOne's products or the Information for your process or end-use application. You have the responsibility to conduct full-scale end-product performance testing to determine suitability in your application, and you assume all risk and liability arising from your use of the Information and/or use or handling of any product. POLYONE MAKES NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, either with respect to the Information or products reflected by the Information. This data sheet shall NOT operate as permission, recommendation, or inducement to practice any patented invention without permission of the patent owner.

## Processing Information

Extrusion	Typical Value (English)	Typical Value (SI)
Melt Temperature	380 to 410 °F	193 to 210 °C

## Notes

<sup>1</sup> Typical values are not to be construed as specifications.

<sup>2</sup> Type I, 0.20 in/min (5.1 mm/min)

<sup>3</sup> Procedure A, C.125 Dart

<sup>4</sup> Procedure B, C.125 Dart

<sup>5</sup> Annealed at 50 deg.C

<sup>6</sup> Annealed at 60 deg.C

## CONTACT INFORMATION

## Americas

United States - Avon Lake  
+1 440 930 1000

United States - McHenry  
+1 815 385 8500

## Asia

China - Guangzhou  
+86 20 8732 7260

China - Shenzhen  
+86 755 2969 2888

China - Suzhou  
+86 512 6823 24 38

China - Suzhou  
+86 512 6265 2600

Hong Kong -  
+852 2690 5332

Taiwan - Yonghe City,  
+886 9396 99740, +886 2929 1849

## Europe

Germany - Gaggenau  
+49 7225 6802 0

Spain - Barbastro (Huesca)  
+34 974 310 314



*Beyond Polymers.*

*Better Business Solutions. SM*

[www.polyone.com](http://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 21 5080 1188

## PolyOne Europe

6 Giällewee  
+352 269 050 35

Copyright ©, 2015 PolyOne Corporation. PolyOne makes no representations, guarantees, or warranties of any kind with respect to the Information contained in this document about its accuracy, suitability for particular applications, or the results obtained or obtainable using the information. Some of the Information arises from laboratory work with small-scale equipment which may not provide a reliable indication of performance or properties obtained or obtainable on larger-scale equipment. Values reported as "typical" or stated without a range do not state minimum or maximum properties; consult your sales representative for property ranges and min/max specifications. Processing conditions can cause material properties to shift from the values stated in the Information. PolyOne makes no warranties or guarantees respecting suitability of either PolyOne's products or the Information for your process or end-use application. You have the responsibility to conduct full-scale end-product performance testing to determine suitability in your application, and you assume all risk and liability arising from your use of the Information and/or use or handling of any product. POLYONE MAKES NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, either with respect to the Information or products reflected by the Information. This data sheet shall NOT operate as permission, recommendation, or inducement to practice any patented invention without permission of the patent owner.