Geon™ Vinyl Dry Blend E7000

Rigid Polyvinyl Chloride

Key Characteristics

General			
Material Status	• Commercial: Active		
Regional Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• High Impact Resistance		
Uses	• Outdoor Applications		
Forms	• Powder		
Processing Method	• Extrusion	• Profile Extrusion	

Technical Properties [1]

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Specific Gravity	1.42	1.42	ASTM D792
PVC Cell Classification	1-32443-43-0000	1-32443-43-0000	ASTM D4216
PVC Cell Classification	13344	13344	ASTM D1784
Mechanical	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Tensile Modulus [2]	384000 psi	2650 MPa	ASTM D638
Tensile Strength [2] (Yield)	6530 psi	45.0 MPa	ASTM D638
Flexural Modulus	403000 psi	2780 MPa	ASTM D790
Flexural Strength	11900 psi	82.0 MPa	ASTM D790
Impact	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Notched Izod Impact - Across Flow			ASTM D256A
73°F (23°C), 0.125 in (3.18 mm), Compression Molded	3.4 ft·lb/in	180 J/m	
Drop Impact Resistance			ASTM D4226
73°F (23°C) [3]	1.50 in·lb/mil	66.7 J/cm	
73°F (23°C) [4]	4.00 in·lb/mil	178 J/cm	
Hardness	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Durometer Hardness (Shore D)	79	79	ASTM D2240
Thermal	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Deflection Temperature Under Load			ASTM D648
66 psi (0.45 MPa), Unannealed, 0.125 in (3.18 mm)	174 °F	78.9 °C	
Deflection Temperature Under Load			ASTM D648
66 psi (0.45 MPa), Annealed, 0.125 in (3.18 mm)	178 °F	81.1 °C	
Deflection Temperature Under Load			ASTM D648
264 psi (1.8 MPa), Unannealed, 0.125 in (3.18 mm)	165 °F	73.9 °C	
Deflection Temperature Under Load			ASTM D648
264 psi (1.8 MPa), Annealed, 0.125 in (3.18 mm)	172 °F	77.8 °C	
CLTE - Flow	3.6E-5 in/in/°F	6.4E-5 cm/cm/°C	ASTM D696

Additional Information

60 degree gloss comparisons: Geon E7000 is 47-49;Geon E7456 is 40-49;Geon E7130 is 38-43;Geon E7370 is 26-31

Processing Information

Extrusion	Typical Value (English)	Typical Value (SI)
Melt Temperature	380 to 400 °F	193 to 204 °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 A, C.125 Dart

[4] Procedure B, C.125 Dart

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

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