Geon™ Vinyl Rigid Extrusion 87150

Rigid Polyvinyl Chloride

Key Characteristics

General			
Material Status	• Commercial: Active		
Regional Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Uses	• Profiles		
Agency Ratings	• NSF 51		
Forms	• Pellets		
Processing Method	• Extrusion		

Technical Properties [1]

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Specific Gravity	1.44	1.44	ASTM D792
PVC Cell Classification	16344	16344	ASTM D1784
Mechanical	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Tensile Modulus [2]	392000 psi	2710 MPa	ASTM D638
Tensile Strength [2] (Yield)	6080 psi	41.9 MPa	ASTM D638
Flexural Modulus	366000 psi	2520 MPa	ASTM D790
Flexural Strength	10500 psi	72.1 MPa	ASTM D790
Impact	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Notched Izod Impact			ASTM D256A
73°F (23°C), 0.125 in (3.18 mm), Injection Molded	21 ft·lb/in	1100 J/m	
Across Flow : 73°F (23°C), 0.125 in (3.18 mm), Compression Molded	16 ft·lb/in	870 J/m	
Flow : 73°F (23°C), 0.125 in (3.18 mm), Compression Molded	13 ft·lb/in	700 J/m	
Drop Impact Resistance			ASTM D4226
73°F (23°C) [3]	1.18 in·lb/mil	52.5 J/cm	
73°F (23°C) [4]	2.42 in·lb/mil	108 J/cm	
Hardness	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Durometer Hardness (Shore D, 15 sec)	83	83	ASTM D2240
Thermal	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Deflection Temperature Under Load			ASTM D648
264 psi (1.8 MPa), Unannealed, 0.125 in (3.18 mm)	166 °F	74.4 °C	
CLTE - Flow	3.6E-5 in/in/°F	6.5E-5 cm/cm/°C	ASTM D696
Flammability	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Flame Rating			UL 94
0.0295 in (0.749 mm), ALL	V-0	V-0	
0.0748 in (1.90 mm), ALL	5VA	5VA	
CSA Flammability [5]			
27.6 mil (701.0 µm)	V-0	V-0	
28.7 mil (730.0 µm)	5VA	5VA	
Additional Information	**Typical Value (English)**	**Typical Value (SI)**	
Ease of Sizing	Good	Good	

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	360 to 380 °F	182 to 193 °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

[5] All Colors

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