



Geon™ Vinyl Rigid Extrusion L6256

Rigid Polyvinyl Chloride

Key Characteristics

General			
Material Status	• Commercial: Active		
Regional Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Good Surface Finish • High Flow		
Uses	• Profiles		
Agency Ratings	• NSF 51	• UL 94	
Forms	• Cube		
Processing Method	• Extrusion		

Technical Properties ¹

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Specific Gravity	1.40	1.40	ASTM D792
PVC Cell Classification	16364	16364	ASTM D1784
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Modulus ²	444000 psi	3060 MPa	ASTM D638
Tensile Strength ² (Yield)	6130 psi	42.3 MPa	ASTM D638
Flexural Modulus	386000 psi	2660 MPa	ASTM D790
Flexural Strength	12000 psi	82.7 MPa	ASTM D790
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 ³	2.2 ft·lb/in	120 J/m	
32°F (0°C), 0.125 in (3.18 mm), Compression Molded ⁴	16 ft·lb/in	880 J/m	
73°F (23°C), 0.125 in (3.18 mm), Compression Molded ⁴	22 ft·lb/in	1200 J/m	
Instrumented Dart Impact ⁵			ASTM D3763
0°F (-18°C), 0.0730 in (1.85 mm), brittle	175 in·lb	19.8 J	
32°F (0°C), 0.0730 in (1.85 mm), brittle	194 in·lb	21.9 J	
73°F (23°C), 0.0730 in (1.85 mm), ductile	222 in·lb	25.1 J	
Drop Impact Resistance			ASTM D4226
73°F (23°C) ⁶	1.50 in·lb/mil	66.7 J/cm	
73°F (23°C) ⁷	> 4.00 in·lb/mil	> 178 J/cm	
Hardness	Typical Value (English)	Typical Value (SI)	Test Method
Durometer Hardness (Shore D, 15 sec)	80	80	ASTM D2240
Thermal	Typical Value (English)	Typical Value (SI)	Test Method
Deflection Temperature Under Load 66 psi (0.45 MPa), Unannealed	172 °F	77.7 °C	ASTM D648
Deflection Temperature Under Load 66 psi (0.45 MPa), Annealed	176 °F	80.0 °C	ASTM D648

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.

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)	166 °F	74.5 °C	ASTM D648
Deflection Temperature Under Load 264 psi (1.8 MPa), Annealed	172 °F	78.0 °C	ASTM D648
CLTE - Flow	3.5E-5 in/in/°F	6.3E-5 cm/cm/°C	ASTM D696
Flammability	Typical Value (English)	Typical Value (SI)	Test Method
Flame Rating 0.0276 in (0.701 mm), ALL 0.118 in (3.00 mm), ALL	V-0 5VA	V-0 5VA	UL 94
Additional Information	Typical Value (English)	Typical Value (SI)	
Ease of Sizing	Good	Good	

Processing Information

Extrusion	Typical Value (English)	Typical Value (SI)
Melt Temperature	350 to 370 °F	177 to 188 °C

Notes

- ¹ Typical values are not to be construed as specifications.
- ² Type I, 0.20 in/min (5.1 mm/min)
- ³ all complete breaks
- ⁴ all hinge breaks
- ⁵ 10.8 ft/sec (3.30 m/sec)
- ⁶ Procedure A, C.125 Dart
- ⁷ Procedure B, C.125 Dart

CONTACT INFORMATION

Americas	Asia	Europe
United States - Avon Lake +1 440 930 1000	China - Guangzhou +86 20 8732 7260	Germany - Gaggenau +49 7225 6802 0
United States - McHenry +1 815 385 8500	China - Shenzhen +86 755 2969 2888	Spain - Barbaastro (Huesca) +34 974 310 314
	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	



Beyond Polymers.
Better Business Solutions.™
 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.