

PolyOne Geon® 87555 Vinyl Compound - Rigid (RPVC)

Categories: [Polymer](#); [Thermoplastic](#); [Vinyl](#)

Material Notes: Description/Features:

- Transparent
- Interior UV Stable
- High Impact
- UL 94 V0

Applications:

- Custom Profiles
- Point of Purchase Datastrips
- General Purpose

Processing Method:

- Extrusion-Single Screw

PolyOne First Choice

Disclaimer: Note: The Cell Classification was determined using the notched Izod test with injection molded samples.

Information provided by PolyOne Corporation.

Vendors: No vendors are listed for this material. Please [click here](#) if you are a supplier and would like information on how to add your listing to this material.

Physical Properties	Metric	English	Comments
Specific Gravity	1.33 g/cc	0.0480 lb/in ³	ASTM D792
Mechanical Properties	Metric	English	Comments
Hardness, Shore D	82	82	15 sec; ASTM D2240
Tensile Strength, Yield	53.4 MPa	7740 psi	Type 1 - Rigid, 0.2 in/min; ASTM D638
Tensile Modulus	2.789 GPa	404.5 ksi	Type 1 - Rigid, 0.2 in/min; ASTM D638
Flexural Modulus	2.84 GPa	412 ksi	ASTM D790
Flexural Strength	88.53 MPa	12840 psi	ASTM D790
Dart Drop Total Energy	53.4 J/cm	0.100 ft-lb/mil	Procedure A, 0.125 in Conical Dart, 73°F (23°C); ASTM D4226
	171 J/cm	0.320 ft-lb/mil	Procedure B, 0.125 in Conical Dart, 73°F (23°C); ASTM D4226
Izod Impact, Notched	1.39 J/cm	2.60 ft-lb/in	Method A, With Grain - Comp. Molded, 0.125 in bars, 73°F (23°C); ASTM D256
	5.71 J/cm	10.7 ft-lb/in	Method A, Against Grain - Comp. Molded, 0.125 in bars, 73°F (23°C); ASTM D256
	10.9 J/cm	20.5 ft-lb/in	Method A, Injection Molded, 0.125 in bars, 73°F (23°C); ASTM D256
Thermal Properties	Metric	English	Comments
CTE, linear	70.2 $\mu\text{m/m-}^\circ\text{C}$ @Temperature 20.0 °C	39.0 $\mu\text{in/in-}^\circ\text{F}$ @Temperature 68.0 °F	ASTM D696
Deflection Temperature at 1.8 MPa (264 psi)	67.2 °C	153 °F	Unannealed, 0.125 in bars; ASTM D648
Flammability, UL94	V-0	V-0	All Colors; 0.059 in.
Processing Properties	Metric	English	Comments
Melt Temperature	182 - 193 °C	360 - 380 °F	Extrusion
Descriptive Properties	Metric	English	Comments
Cell Classification D1784	16453		ASTM D1784

Some of the values displayed above may have been converted from their original units and/or rounded in order to display the information in a consistent format. Users requiring more precise data for scientific or engineering calculations can click on the property value to see the original value as well as raw conversions to equivalent units. We advise that you only use the original value or one of its raw conversions in your calculations to minimize rounding error. We also ask that you refer to MatWeb's disclaimer and terms of use regarding this information. [Click here](#) to view all the property values for this datasheet as they were originally entered into MatWeb.