



Geon™ Vinyl Rigid Extrusion 87727

Rigid Polyvinyl Chloride

Key Characteristics

| General | |
|-----------------------|---|
| Material Status | • Commercial: Active |
| Regional Availability | • Africa & Middle East • Europe • Asia Pacific • Latin America • North America |
| Features | • General Purpose • Good UV Resistance |
| Uses | • General Purpose • Profiles |
| Appearance | • Clear/Transparent |
| Forms | • Pellets |
| Processing Method | • Extrusion |

Technical Properties ¹

| Physical | Typical Value (English) | Typical Value (SI) | Test Method |
|---|-------------------------|--------------------|-------------|
| Specific Gravity | 1.38 | 1.38 | ASTM D792 |
| PVC Cell Classification | 11553 | 11553 | ASTM D1784 |
| Mechanical | Typical Value (English) | Typical Value (SI) | Test Method |
| Tensile Modulus ² | 416000 psi | 2870 MPa | ASTM D638 |
| Tensile Strength ² (Yield) | 8250 psi | 56.9 MPa | ASTM D638 |
| Flexural Modulus | 423000 psi | 2920 MPa | ASTM D790 |
| Flexural Strength | 13600 psi | 93.5 MPa | ASTM D790 |
| Impact | Typical Value (English) | Typical Value (SI) | Test Method |
| Notched Izod Impact | | | ASTM D256 |
| 73°F (23°C), 0.125 in (3.18 mm) | 0.85 ft·lb/in | 45 J/m | |
| Drop Impact Resistance | | | ASTM D4226 |
| 73°F (23°C) ³ | 1.49 in·lb/mil | 66.3 J/cm | |
| 73°F (23°C) ⁴ | 3.94 in·lb/mil | 175 J/cm | |
| Hardness | Typical Value (English) | Typical Value (SI) | Test Method |
| Durometer Hardness (Shore D, 15 sec) | 85 | 85 | ASTM D2240 |
| Thermal | Typical Value (English) | Typical Value (SI) | Test Method |
| Deflection Temperature Under Load | | | ASTM D648 |
| 264 psi (1.8 MPa), Annealed, 0.125 in (3.18 mm), Injection Molded | 142 °F | 61.2 °C | |
| CLTE - Flow | 3.9E-5 in/in/°F | 7.0E-5 cm/cm/°C | ASTM D696 |
| Flammability | Typical Value (English) | Typical Value (SI) | Test Method |
| Flame Rating (0.0591 in (1.50 mm), TP) | V-0 | V-0 | UL 94 |

Additional Information

Note: The Cell Classification was determined using the notched Izod test with injection molded samples. Superior UV Stability for interior use.

Processing Information

| Extrusion | Typical Value (English) | Typical Value (SI) |
|------------------|-------------------------|--------------------|
| Melt Temperature | 360 to 380 °F | 182 to 193 °C |

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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

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