



Geon™ Vinyl Rigid Extrusion 87358

Rigid Polyvinyl Chloride

Key Characteristics

| General | | | |
|-----------------------|--|-----------------------------|-----------------|
| Material Status | • Commercial: Active | | |
| Regional Availability | • Africa & Middle East • Asia Pacific | • Europe • Latin America | • North America |
| Features | • High Gloss | | |
| Forms | • Pellets | | |
| Processing Method | • Sheet Extrusion | • Thermoforming | |

Technical Properties ¹

| Physical | Typical Value (English) | Typical Value (SI) | Test Method |
|---|-------------------------|--------------------|-------------|
| Specific Gravity | 1.35 | 1.35 | ASTM D792 |
| PVC Cell Classification | 15343 | 15343 | ASTM D1784 |
| Mechanical | Typical Value (English) | Typical Value (SI) | Test Method |
| Tensile Modulus ² | 372000 psi | 2560 MPa | ASTM D638 |
| Tensile Strength ² (Yield) | 6740 psi | 46.5 MPa | ASTM D638 |
| Flexural Modulus | 397000 psi | 2740 MPa | ASTM D790 |
| Flexural Strength | 11400 psi | 78.6 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 | 11 ft·lb/in | 580 J/m | |
| Across Flow : 73°F (23°C), 0.125 in (3.18 mm), Compression Molded | 6.2 ft·lb/in | 330 J/m | |
| Flow : 73°F (23°C), 0.125 in (3.18 mm), Compression Molded | 7.8 ft·lb/in | 420 J/m | |
| Drop Impact Resistance | | | ASTM D4226 |
| 73°F (23°C) ³ | 1.42 in·lb/mil | 63.2 J/cm | |
| 73°F (23°C) ⁴ | 4.47 in·lb/mil | 199 J/cm | |
| Hardness | Typical Value (English) | Typical Value (SI) | Test Method |
| Durometer Hardness (Shore D, 15 sec) | 81 | 81 | 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) | 141 °F | 60.6 °C | |
| CLTE - Flow | 4.1E-5 in/in/°F | 7.4E-5 cm/cm/°C | ASTM D696 |

Additional Information
 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 | 370 to 380 °F | 188 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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