



Geon™ Vinyl Rigid Extrusion 87560

Rigid Polyvinyl Chloride

Key Characteristics

| General | |
|-----------------------|---|
| Material Status | • Commercial: Active |
| Regional Availability | • Africa & Middle East • Europe • Asia Pacific • Latin America • North America |
| Appearance | • Clear/Transparent |
| Forms | • Pellets |
| Processing Method | • Sheet Extrusion |

Technical Properties ¹

| Physical | Typical Value (English) | Typical Value (SI) | Test Method |
|---|-------------------------|--------------------|----------------------|
| Density / Specific Gravity | 1.33 | 1.33 | ASTM D792 |
| PVC Cell Classification | 12443 | 12443 | ASTM D1784 |
| Mechanical | Typical Value (English) | Typical Value (SI) | Test Method |
| Tensile Modulus ² | 396000 psi | 2730 MPa | ASTM D638 |
| Tensile Strength ² (Yield) | 7520 psi | 51.8 MPa | ASTM D638 |
| Flexural Modulus | 424000 psi | 2920 MPa | ASTM D790 |
| Flexural Strength | 12500 psi | 86.2 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 | 1.4 ft·lb/in | 75 J/m | |
| Across Flow : 73°F (23°C), 0.125 in (3.18 mm), Compression Molded | 1.0 ft·lb/in | 53 J/m | |
| Flow : 73°F (23°C), 0.125 in (3.18 mm), Compression Molded | 1.6 ft·lb/in | 85 J/m | |
| Drop Impact Resistance | | | ASTM D4226 |
| 73°F (23°C) ³ | 1.35 in·lb/mil | 60.1 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) | 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) | 149 °F | 65.0 °C | |
| Vicat Softening Temperature | | | |
| -- | 180 °F | 82.2 °C | ISO 306 ⁵ |
| -- | 164 °F | 73.1 °C | ISO 306 ⁶ |
| CLTE - Flow | 4.0E-5 in/in/°F | 7.2E-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 | 375 to 400 °F | 191 to 204 °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 Rate B (120°C/h), Loading 1 (10 N)

⁶ Rate B (120°C/h), Loading 2 (50 N)



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