



Geon™ Vinyl Flexible 90451

Flexible Polyvinyl Chloride

Key Characteristics

| General | | | |
|---------------------------|--|-----------------------------|-----------------|
| Material Status | • Commercial: Active | | |
| Regional Availability | • Africa & Middle East • Asia Pacific | • Europe • Latin America | • North America |
| Features | • Low Gloss | | |
| Uses | • Automotive Applications | • Automotive Interior Trim | |
| Automotive Specifications | • FORD WSB-M4D871-A3 | • SUBARU Unspecified | |
| Forms | • Pellets | | |
| Processing Method | • Injection Molding | | |

Technical Properties ¹

| Physical | Typical Value (English) | Typical Value (SI) | Test Method |
|---|-------------------------|--------------------|-------------|
| Specific Gravity | 1.29 | 1.29 | ASTM D792 |
| Mechanical | Typical Value (English) | Typical Value (SI) | Test Method |
| Tensile Strength ² (Break) | 1940 psi | 13.4 MPa | ASTM D638 |
| Tensile Elongation ² (Break) | 350 % | 350 % | ASTM D638 |
| Elastomers | Typical Value (English) | Typical Value (SI) | Test Method |
| Tear Strength ³ | 320 lbf/in | 56.0 kN/m | ASTM D624 |
| Hardness | Typical Value (English) | Typical Value (SI) | Test Method |
| Durometer Hardness (Shore A, 15 sec) | 72 | 72 | ASTM D2240 |
| Thermal | Typical Value (English) | Typical Value (SI) | Test Method |
| Brittleness Temperature | -29.2 °F | -34.0 °C | ASTM D746 |
| Cold Flexibility ⁴ | | | GM 9503P |
| -20°F (-29°C), 75.0 mil (1.91 mm) | Pass | Pass | |
| Flammability | Typical Value (English) | Typical Value (SI) | Test Method |
| Automotive Burn Test | 0 in/min | 0 mm/min | FMVSS 302 |
| Fogging | | | SAE J1756 |
| -- ⁵ | 90 % | 90 % | |
| -- ⁶ | 88 % | 88 % | |
| Additional Information | Typical Value (English) | Typical Value (SI) | Test Method |
| Xenon Weatherometer ⁷ | Pass | Pass | SAE J1960 |
| Note: Automotive OEM approval(s). | | | |

Notes

¹ Typical values are not to be construed as specifications.

² Type IV, 20 in/min (510 mm/min)

³ Die C, 20 in/min (510 mm/min)

⁴ 25 mm, 4 hr

⁵ 3 hrs, 212°F(100°C), 70°F(21°C), after 1 hour

⁶ 6 hrs, 203°F(95°C), 100°F(38°C), after 16 hours

⁷ Interior, 602 kJ/m², All Colors, dE* < 3.0

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