



## Geon™ Vinyl Fittings 87431

### Rigid Polyvinyl Chloride

#### Key Characteristics

| General               |                                          |                             |                           |
|-----------------------|------------------------------------------|-----------------------------|---------------------------|
| Material Status       | • Commercial: Active <sup>1</sup>        |                             |                           |
| Regional Availability | • Africa & Middle East<br>• Asia Pacific | • Europe<br>• Latin America | • North America           |
| Features              | • Low Flow                               |                             |                           |
| Uses                  | • Fittings                               |                             |                           |
| Agency Ratings        | • NSF STD-14                             | • NSF STD-61                | • NSF Type I <sup>2</sup> |
| Forms                 | • Pellets                                |                             |                           |
| Processing Method     | • Injection Molding                      |                             |                           |

#### Technical Properties <sup>3</sup>

| Physical                                             | Typical Value (English) | Typical Value (SI) | Test Method |
|------------------------------------------------------|-------------------------|--------------------|-------------|
| Density / Specific Gravity                           | 1.38                    | 1.38               | ASTM D792   |
| Molding Shrinkage - Flow                             | 2.0E-3 to 5.0E-3 in/in  | 0.20 to 0.50 %     | ASTM D955   |
| PVC Cell Classification                              | 12464                   | 12464              | ASTM D1784  |
| Mechanical                                           | Typical Value (English) | Typical Value (SI) | Test Method |
| Tensile Modulus <sup>4</sup>                         | 445000 psi              | 3070 MPa           | ASTM D638   |
| Tensile Strength <sup>4</sup> (Yield)                | 7700 psi                | 53.1 MPa           | ASTM D638   |
| Flexural Modulus                                     | 480000 psi              | 3310 MPa           | ASTM D790   |
| Flexural Strength                                    | 13600 psi               | 93.8 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),<br>Injection Molded | 1.0 ft·lb/in            | 53 J/m             |             |
| 73°F (23°C), 0.250 in (6.35 mm),<br>Injection Molded | 0.90 ft·lb/in           | 48 J/m             |             |
| Hardness                                             | Typical Value (English) | Typical Value (SI) | Test Method |
| Durometer Hardness (Shore D)                         | 88                      | 88                 | ASTM D2240  |
| Thermal                                              | Typical Value (English) | Typical Value (SI) | Test Method |
| Deflection Temperature Under Load                    |                         |                    | ASTM D648   |
| 264 psi (1.8 MPa), Unannealed, 0.250 in<br>(6.35 mm) | 162 °F                  | 72.2 °C            |             |

#### Processing Information

| Injection              | Typical Value (English) | Typical Value (SI) |
|------------------------|-------------------------|--------------------|
| Processing (Melt) Temp | 395 to 400 °F           | 202 to 204 °C      |

#### Notes

<sup>1</sup> RoHS compliant.

<sup>2</sup> NSF Agency ratings are based on tested and certified colors. Please contact PolyOne technical for further information.

<sup>3</sup> Typical values are not to be construed as specifications.

<sup>4</sup> Type I, 2.0 in/min (51 mm/min)