



## Geon™ Vinyl Flexible A8000

### Flexible Polyvinyl Chloride

#### Key Characteristics

| Product Description    |                                          |                             |                 |
|------------------------|------------------------------------------|-----------------------------|-----------------|
| Interior applications. |                                          |                             |                 |
| General                |                                          |                             |                 |
| Material Status        | • Commercial: Active                     |                             |                 |
| Regional Availability  | • Africa & Middle East<br>• Asia Pacific | • Europe<br>• Latin America | • North America |
| Features               | • General Purpose<br>• High Gloss        |                             |                 |
| Uses                   | • General Purpose                        |                             |                 |
| Agency Ratings         | • NSF STD-51 <sup>1</sup>                |                             |                 |
| Appearance             | • Clear/Transparent                      |                             |                 |
| Forms                  | • Pellets                                |                             |                 |
| Processing Method      | • Extrusion                              | • Injection Molding         |                 |

#### Technical Properties <sup>2</sup>

| Physical                                        | Typical Value (English) | Typical Value (SI) | Test Method |
|-------------------------------------------------|-------------------------|--------------------|-------------|
| Density / Specific Gravity                      | 1.20                    | 1.20               | ASTM D792   |
| Molding Shrinkage - Flow                        | 0.015 to 0.019 in/in    | 1.5 to 1.9 %       | ASTM D955   |
| Mechanical                                      | Typical Value (English) | Typical Value (SI) | Test Method |
| Tensile Strength <sup>3</sup> (100% Strain)     | 900 psi                 | 6.21 MPa           | ASTM D638   |
| Tensile Strength <sup>3</sup> (Break)           | 2050 psi                | 14.1 MPa           | ASTM D638   |
| Tensile Elongation <sup>3</sup> (Break)         | 450 %                   | 450 %              | ASTM D638   |
| Elastomers                                      | Typical Value (English) | Typical Value (SI) | Test Method |
| Tear Strength <sup>4</sup>                      | 330 lbf/in              | 57.8 kN/m          | ASTM D624   |
| Compression Set (73°F (23°C), 22 hr)            | 25 %                    | 25 %               | ASTM D395   |
| Clash-Berg Modulus                              |                         |                    | ASTM D1043  |
| --                                              | 25500 psi               | 176 MPa            |             |
| -44°F (-42°C)                                   | 45000 psi               | 310 MPa            |             |
| Hardness                                        | Typical Value (English) | Typical Value (SI) | Test Method |
| Durometer Hardness                              |                         |                    | ASTM D2240  |
| Shore A                                         | 80                      | 80                 |             |
| Shore A, 15 sec                                 | 70                      | 70                 |             |
| Thermal                                         | Typical Value (English) | Typical Value (SI) | Test Method |
| Brittleness Temperature                         | -49.0 °F                | -45.0 °C           | ASTM D746   |
| Optical                                         | Typical Value (English) | Typical Value (SI) | Test Method |
| Transmittance <sup>5</sup> (75.0 mil (1910 µm)) | 82.0 %                  | 82.0 %             | ASTM D1003  |
| Haze (75.0 mil (1910 µm))                       | 4.00 %                  | 4.00 %             | ASTM D1003  |

#### Processing Information

| Injection              | Typical Value (English) | Typical Value (SI) |
|------------------------|-------------------------|--------------------|
| Processing (Melt) Temp | 380 to 400 °F           | 193 to 204 °C      |
| Extrusion              | Typical Value (English) | Typical Value (SI) |
| Melt Temperature       | 345 to 355 °F           | 174 to 179 °C      |

**Notes**

<sup>1</sup> TRANS 9400.

Max. Temp. of use = 100 deg.F.

<sup>2</sup> Typical values are not to be construed as specifications.

<sup>3</sup> 20 in/min (510 mm/min)

<sup>4</sup> Die C, 20 in/min (510 mm/min)

<sup>5</sup> CIE Illuminant C



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