

## PolyOne Geon™ SF M7000 Polyvinyl Chloride, Rigid (PVC, Rigid)

Category : Polymer , Thermoplastic , Vinyl (PVC) , PVC, Rigid Grade

### Material Notes:

Information provided by PolyOne

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_PolyOne-Geon-SF-M7000-Polyvinyl-Chloride-Rigid-PVC-Rigid.php](http://www.lookpolymers.com/polymer_PolyOne-Geon-SF-M7000-Polyvinyl-Chloride-Rigid-PVC-Rigid.php)

| Physical Properties         | Metric                | English               | Comments  |
|-----------------------------|-----------------------|-----------------------|-----------|
| Specific Gravity            | 1.33 g/cc             | 1.33 g/cc             | ASTM D792 |
| Linear Mold Shrinkage, Flow | 0.0020 - 0.0050 cm/cm | 0.0020 - 0.0050 in/in | ASTM D955 |
| Spiral Flow                 | 119.38 cm             | 47.000 in             |           |

| Mechanical Properties   | Metric                                      | English                                       | Comments                     |
|-------------------------|---------------------------------------------|-----------------------------------------------|------------------------------|
| Hardness, Shore D       | 79                                          | 79                                            | ASTM D2240                   |
| Tensile Strength, Yield | 41.4 MPa                                    | 6000 psi                                      | Type I, 51 mm/min; ASTM D638 |
| Elongation at Break     | 35 %                                        | 35 %                                          | Type I, 51 mm/min; ASTM D638 |
| Tensile Modulus         | 2.28 GPa                                    | 331 ksi                                       | Type I, 51 mm/min; ASTM D638 |
| Flexural Strength       | 62.7 MPa                                    | 9090 psi                                      | ASTM D790                    |
| Flexural Modulus        | 2.31 GPa                                    | 335 ksi                                       | ASTM D790                    |
| Izod Impact, Notched    | 1.10 J/cm                                   | 2.06 ft-lb/in                                 | Injection Molded; ASTM D256A |
|                         | @Thickness 3.18 mm,<br>Temperature -18.0 °C | @Thickness 0.125 in,<br>Temperature -0.400 °F |                              |
|                         | 2.70 J/cm                                   | 5.06 ft-lb/in                                 |                              |
|                         | @Thickness 3.18 mm,<br>Temperature 0.000 °C | @Thickness 0.125 in,<br>Temperature 32.0 °F   | Injection Molded; ASTM D256A |
|                         | 6.40 J/cm                                   | 12.0 ft-lb/in                                 |                              |
|                         | @Thickness 3.18 mm,<br>Temperature 23.0 °C  | @Thickness 0.125 in,<br>Temperature 73.4 °F   | Injection Molded; ASTM D256A |

| Thermal Properties                             | Metric             | English             | Comments              |
|------------------------------------------------|--------------------|---------------------|-----------------------|
| Deflection Temperature at 0.46 MPa<br>(66 psi) | 67.2 °C            | 153 °F              | Unannealed; ASTM D648 |
|                                                | @Thickness 3.18 mm | @Thickness 0.125 in |                       |
|                                                | 71.1 °C            | 160 °F              | Annealed; ASTM D648   |
|                                                | @Thickness 3.18 mm | @Thickness 0.125 in |                       |

| Thermal Properties                          | Metric             | English              | Comments              |
|---------------------------------------------|--------------------|----------------------|-----------------------|
| Deflection Temperature at 1.8 MPa (264 psi) | @Thickness 3.18 mm | @Thickness 0.125 in  | Unannealed; ASTM D648 |
|                                             | 70.0 °C            | 158 °F               | Annealed; ASTM D648   |
|                                             | @Thickness 3.18 mm | @Thickness 0.125 in  |                       |
| UL RTI, Electrical                          | 90.0 °C            | 194 °F               | UL 746                |
| UL RTI, Mechanical with Impact              | 85.0 °C            | 185 °F               | UL 746                |
| UL RTI, Mechanical without Impact           | 90.0 °C            | 194 °F               | UL 746                |
| Flammability, UL94                          | V-0                | V-0                  |                       |
|                                             | 5VA                | 5VA                  |                       |
|                                             | V-0                | V-0                  | ALL; UL 94            |
|                                             | @Thickness 1.80 mm | @Thickness 0.0709 in |                       |
|                                             | 5VA                | 5VA                  | ALL; UL 94            |
|                                             | @Thickness 1.80 mm | @Thickness 0.0709 in |                       |
|                                             | 5VA                | 5VA                  | All Colors            |
|                                             | @Thickness 1.60 mm | @Thickness 0.0630 in |                       |

| Processing Properties | Metric       | English      | Comments |
|-----------------------|--------------|--------------|----------|
| Melt Temperature      | 199 - 210 °C | 390 - 410 °F |          |

| Descriptive Properties | Value                                  | Comments |
|------------------------|----------------------------------------|----------|
| Features               | General Purpose                        |          |
|                        | High Flow                              |          |
|                        | High Impact Resistance                 |          |
| Forms                  | Pellets                                |          |
| Generic Material       | PVC, Rigid                             |          |
| Generic Name           | Polyvinyl Chloride, Rigid (PVC, Rigid) |          |
| Processing Method      | Injection Molding                      |          |
| Regional Availability  | Africa & Middle East                   |          |
|                        | Asia Pacific                           |          |
|                        | Europe                                 |          |

| Descriptive Properties | Value                              | Comments |
|------------------------|------------------------------------|----------|
|                        | North America                      |          |
|                        | South America                      |          |
| RoHS Compliance        | RoHS Compliant                     |          |
| Uses                   | Construction Applications          |          |
|                        | Electrical/Electronic Applications |          |
|                        | General Purpose                    |          |
|                        | Telecommunications                 |          |

## Contact Songhan Plastic Technology Co.,Ltd.

Website : [www.lookpolymers.com](http://www.lookpolymers.com)

Email : [sales@lookpolymers.com](mailto:sales@lookpolymers.com)

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215,Fengxian District, Shanghai City,China