

## EMS-Grivory Grivory® BG-25 S PA6-GF25

Category : Polymer , Thermoplastic , Nylon , Nylon 6 , Nylon 6 , 30% Glass Fiber Filled

### Material Notes:

Product description: Grilon BG-25 S is a heat stabilized PA6 injection molding grade with 25 % glass fibers. Grilon BG-25 S has the following important properties: Excellent surface finish Easy flowing Easy processing Application examples are automotive applications such as handles and levers and fixing parts in the electronic field. Information provided by EMS Grivory

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_EMS-Grivory-Grivory-BG-25-S-PA6-GF25.php](http://www.lookpolymers.com/polymer_EMS-Grivory-Grivory-BG-25-S-PA6-GF25.php)

| Physical Properties               | Metric       | English                   | Comments        |
|-----------------------------------|--------------|---------------------------|-----------------|
| Density                           | 1.31 g/cc    | 0.0473 lb/in <sup>3</sup> | ISO 1183        |
| Water Absorption                  | 7.0 %        | 7.0 %                     | ISO 62          |
| Moisture Absorption               | 2.00 %       | 2.00 %                    | ISO 62          |
| Linear Mold Shrinkage, Flow       | 0.0010 cm/cm | 0.0010 in/in              | ISO 294-4, 2577 |
| Linear Mold Shrinkage, Transverse | 0.0050 cm/cm | 0.0050 in/in              | ISO 294-4, 2577 |

| Mechanical Properties     | Metric                 | English                    | Comments                  |
|---------------------------|------------------------|----------------------------|---------------------------|
| Ball Indentation Hardness | 90.0 MPa               | 13100 psi                  | conditioned; ISO 2039-1   |
|                           | 185 MPa                | 26800 psi                  | dry; ISO 2039-1           |
| Tensile Strength at Break | 90.0 MPa               | 13100 psi                  | conditioned; ISO 527-1/-2 |
|                           | 165 MPa                | 23900 psi                  | dry; ISO 527-1/-2         |
| Elongation at Break       | 3.0 %                  | 3.0 %                      | dry; ISO 527-1/-2         |
|                           | 8.0 %                  | 8.0 %                      | conditioned; ISO 527-1/-2 |
| Tensile Modulus           | 4.80 GPa               | 696 ksi                    | conditioned; ISO 527-1/-2 |
|                           | 8.50 GPa               | 1230 ksi                   | dry; ISO 527-1/-2         |
| Charpy Impact Unnotched   | 8.50 J/cm <sup>2</sup> | 40.4 ft-lb/in <sup>2</sup> | dry; ISO 179/1eU          |
|                           | 8.50 J/cm <sup>2</sup> | 40.4 ft-lb/in <sup>2</sup> | conditioned; ISO 179/1eU  |
|                           | 7.00 J/cm <sup>2</sup> | 33.3 ft-lb/in <sup>2</sup> | dry; ISO 179/1eU          |
|                           | @Temperature 30.0 °C   | @Temperature 86.0 °F       |                           |
|                           | 7.00 J/cm <sup>2</sup> | 33.3 ft-lb/in <sup>2</sup> | conditioned; ISO 179/1eU  |
|                           | @Temperature 30.0 °C   | @Temperature 86.0 °F       |                           |

| Charpy Impact, Notched<br>Mechanical Properties | 1.00 J/cm <sup>2</sup><br>Metric                | 4.76 ft-lb/in <sup>2</sup><br>English              | dry; ISO 179/1eA<br>Comments |
|---|---|--|------------------------------|
|   | 2.00 J/cm <sup>2</sup>                          | 9.52 ft-lb/in <sup>2</sup>                         | conditioned; ISO 179/1eA     |
|   | 0.900 J/cm <sup>2</sup><br>@Temperature 30.0 °C | 4.28 ft-lb/in <sup>2</sup><br>@Temperature 86.0 °F | dry; ISO 179/1eU             |
|   | 0.900 J/cm <sup>2</sup><br>@Temperature 30.0 °C | 4.28 ft-lb/in <sup>2</sup><br>@Temperature 86.0 °F | conditioned; ISO 179/1eU     |

| Thermal Properties                             | Metric        | English        | Comments                 |
|--|---------------|----------------|--------------------------|
| CTE, linear, Parallel to Flow                  | 25.0 µm/m-°C  | 13.9 µin/in-°F | ISO 11359-1/-2           |
| CTE, linear, Transverse to Flow                | 80.0 µm/m-°C  | 44.4 µin/in-°F | ISO 11359-1/-2           |
| Melting Point                                  | 222 °C        | 432 °F         | 10°C/min; ISO 11357-1/-3 |
| Maximum Service Temperature, Air               | 90.0 - 110 °C | 194 - 230 °F   | long term; EMS           |
|  | 160 °C        | 320 °F         | short term; EMS          |
| Deflection Temperature at 1.8 MPa<br>(264 psi) | 205 °C        | 401 °F         | ISO 75-1/-2              |
| Deflection Temperature at 8.0 MPa              | 125 °C        | 257 °F         | ISO 75-1/-2              |
| Flammability, UL94                             | HB            | HB             | IEC 60695-11-10          |

| Electrical Properties      | Metric          | English         | Comments                 |
|----------------------------|-----------------|-----------------|--------------------------|
| Volume Resistivity         | 1.00e+13 ohm-cm | 1.00e+13 ohm-cm | conditioned; IEC 60093   |
|                            | 1.00e+14 ohm-cm | 1.00e+14 ohm-cm | dry; IEC 60093           |
| Surface Resistance         | 1.00e+12 ohm    | 1.00e+12 ohm    | IEC 60093                |
| Dielectric Strength        | 29.0 kV/mm      | 737 kV/in       | conditioned; IEC 60243-1 |
|                            | 30.0 kV/mm      | 762 kV/in       | dry; IEC 60243-1         |
| Comparative Tracking Index | 575 V           | 575 V           | conditioned; IEC 60112   |

| Descriptive Properties    | Value                 | Comments |
|---------------------------|-----------------------|----------|
| Automotive                | Air intake systems    |          |
|                           | Interior              |          |
| Electricals & Electronics | Electrical appliances |          |
|                           | Electrical equipment  |          |

| Descriptive Properties | Valueles          | Comments |
|------------------------|-------------------|----------|
| Processing             | Injection Molding |          |

## Contact Songhan Plastic Technology Co.,Ltd.

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