

# Grilon® BGZ-15/2

Polyamide 6

EMS-GRIVORY

## Message:

Grilon® BGZ-15/2 is a Polyamide 6 (Nylon 6) material filled with 15% glass fiber. It is available in Africa & Middle East, Asia Pacific, Europe, Latin America, or North America for injection molding.

Important attributes of Grilon® BGZ-15/2 are:

Flame Rated

RoHS Compliant

Impact Modified

Typical application of Grilon® BGZ-15/2: Automotive

| General Information              |      |                                  |                   |             |
|----------------------------------|------|----------------------------------|-------------------|-------------|
| UL YellowCard                    |      | E53898-243866                    | E132701-237896    |             |
| Filler / Reinforcement           |      | Glass Fiber,15% Filler by Weight |                   |             |
| Additive                         |      | Impact Modifier                  |                   |             |
| Features                         |      | Impact Modified                  |                   |             |
| RoHS Compliance                  |      | RoHS Compliant                   |                   |             |
| Forms                            |      | Granules                         |                   |             |
| Processing Method                |      | Injection Molding                |                   |             |
| Physical                         | Dry  | Conditioned                      | Unit              | Test Method |
| Density                          | 1.18 | --                               | g/cm <sup>3</sup> | ISO 1183    |
| Molding Shrinkage                |      |                                  |                   | ISO 294-4   |
| Across Flow                      | 0.70 | --                               | %                 |             |
| Flow                             | 0.20 | --                               | %                 |             |
| Water Absorption                 |      |                                  |                   |             |
| Saturation, 23°C                 | 8.0  | --                               | %                 |             |
| Equilibrium, 23°C, 50% RH        | 2.0  | --                               | %                 |             |
| Mechanical                       | Dry  | Conditioned                      | Unit              | Test Method |
| Tensile Modulus                  | 5300 | 2800                             | MPa               | ISO 527-2   |
| Tensile Stress (Break)           | 110  | 65.0                             | MPa               | ISO 527-2   |
| Tensile Strain (Break)           | 5.0  | 15                               | %                 | ISO 527-2   |
| Impact                           | Dry  | Conditioned                      | Unit              | Test Method |
| Charpy Notched Impact Strength   |      |                                  |                   | ISO 179/1eA |
| -30°C                            | 11   | 12                               | kJ/m <sup>2</sup> |             |
| 23°C                             | 20   | 25                               | kJ/m <sup>2</sup> |             |
| Charpy Unnotched Impact Strength |      |                                  |                   | ISO 179/1eU |
| -30°C                            | 70   | 75                               | kJ/m <sup>2</sup> |             |
| 23°C                             | 75   | 90                               | kJ/m <sup>2</sup> |             |
| Thermal                          | Dry  | Conditioned                      | Unit              | Test Method |

|                                        |                            |             |          |                      |
|----------------------------------------|----------------------------|-------------|----------|----------------------|
| Heat Deflection Temperature            |                            |             |          |                      |
| 1.8 MPa, Unannealed                    | 190                        | --          | °C       | ISO 75-2/A           |
| 8.0 MPa, Unannealed                    | 55.0                       | --          | °C       | ISO 75-2/C           |
| Continuous Use Temperature             |                            |             |          | Internal Method      |
| -- <sup>1</sup>                        | 90.0 to 120                | --          | °C       |                      |
| -- <sup>2</sup>                        | 160                        | --          | °C       |                      |
| Melting Temperature <sup>3</sup>       | 222                        | --          | °C       | ISO 11357-3          |
| CLTE                                   |                            |             |          | ISO 11359-2          |
| Flow                                   | 5.0E-5                     | --          | cm/cm/°C |                      |
| Transverse                             | 1.2E-4                     | --          | cm/cm/°C |                      |
| Electrical                             | Dry                        | Conditioned | Unit     | Test Method          |
| Surface Resistivity                    | --                         | 1.0E+12     | ohms     | IEC 60093            |
| Volume Resistivity                     | 1.0E+14                    | 1.0E+13     | ohms·cm  | IEC 60093            |
| Electric Strength                      | 40                         | 35          | kV/mm    | IEC 60243-1          |
| Comparative Tracking Index             | --                         | 600         | V        | IEC 60112            |
| Flammability                           | Dry                        | Conditioned | Unit     | Test Method          |
| Flammability Classification (0.800 mm) | HB                         | --          |          | IEC 60695-11-10, -20 |
| Additional Information                 | Dry                        | Conditioned |          | Test Method          |
| ISO Type                               | PA6-HI, MHR, 14-050N, GF15 | --          |          | ISO 1874             |
| NOTE                                   |                            |             |          |                      |
| 1.                                     | Long Term                  |             |          |                      |
| 2.                                     | Short Term                 |             |          |                      |
| 3.                                     | 10°C/min                   |             |          |                      |

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

#### Recommended distributors for this material

### Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China



WECHAT