# VESTAMID® L L-R2-GF25

Polyamide 12

Evonik Industries AG

## Message:

Permanently antistatic and electrically conductive polyamide 12 compounds
Characterization: medium viscosity, 25% chopped strands, heat- and light-stabilized
Application Examples: antistatic and electrically conductive moldings or extrudates for use in areas prone to explosion such as coal mining and other industries, e.g., housings for explosion-protected measurement equipment and switches, ventilation fans for electric motors, chair castors, loud speaker boxes, telephone and radio equipment, profiles for assembly lines, also with electric shock protection
The properties of PA 12 compounds can be modified to suit the requirements of many applications by incorporating various additives such as stabilizers, plasticizers, reinforcements, and fillers.
The VESTAMID® L compounds of Evonik comprise a range of various products that are customized to the requirements of processors and users. Many of the PA 12 compounds are suitable especially for the injection molding of recision parts; others have been developed specifically for the extrusion process.

| General Information | |
|---|---|
| Filler / Reinforcement | Glass Fiber,25% Filler by Weight |
| Additive | Heat Stabilizer |
| | UV Stabilizer |
| Features | Antistatic |
| | Electrically Conductive |
| | Fatigue Resistant |
| | Food Contact Acceptable |
| | Fuel Resistant |
| | Good Abrasion Resistance |
| | Good Impact Resistance |
| | Good Processability |
| | Grease Resistant |
| | Heat Stabilized |
| | High ESCR (Stress Crack Resist.) |
| | Light Stabilized |
| | Low to No Water Absorption |
| | Medium Viscosity |
| | Oil Resistant |
| | Solvent Resistant |
| | Sound Damping |
| | Vibration Damping |
| Uses | Electrical/Electronic Applications |
| | Housings |
| | Mining Applications |
| | Profiles |

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|---|---|---|---|
| Agency Ratings | EU 10/2011 | | |
| Appearance | Black | | |
| Processing Method | Injection Molding | | |
| **Physical** | **Nominal Value** | **Unit** | **Test Method** |
| Density (23°C) | 1.27 | g/cm³ | ISO 1183 |
| Molding Shrinkage | | | ISO 294-4 |
| Across Flow | 1.9 | % | |
| Flow | 0.30 | % | |
| Water Absorption | | | ISO 62 |
| Saturation, 23°C | 1.2 | % | |
| Equilibrium, 23°C, 50% RH | 0.50 | % | |
| **Mechanical** | **Nominal Value** | **Unit** | **Test Method** |
| Tensile Modulus | 6500 | MPa | ISO 527-2 |
| Tensile Stress (Break) | 120 | MPa | ISO 527-2 |
| Tensile Strain (Break) | 5.0 | % | ISO 527-2 |
| **Impact** | **Nominal Value** | **Unit** | **Test Method** |
| Charpy Notched Impact Strength | | | ISO 179/1eA |
| -30°C, Complete Break | 11 | kJ/m² | |
| 23°C, Complete Break | 12 | kJ/m² | |
| Charpy Unnotched Impact Strength | | | ISO 179/1eU |
| -30°C, Complete Break | 70 | kJ/m² | |
| 23°C, Complete Break | 75 | kJ/m² | |
| **Thermal** | **Nominal Value** | **Unit** | **Test Method** |
| Heat Deflection Temperature | | | |
| 0.45 MPa, Unannealed | 175 | °C | ISO 75-2/B |
| 1.8 MPa, Unannealed | 170 | °C | ISO 75-2/A |
| Vicat Softening Temperature | | | |
| -- | 175 | °C | ISO 306/A |
| -- | 170 | °C | ISO 306/B |
| Melting Temperature [1] | 178 | °C | ISO 11357-3 |
| CLTE - Flow (23 to 55°C) | 1.0E-4 | cm/cm/°C | ISO 11359-2 |
| **Electrical** | **Nominal Value** | **Unit** | **Test Method** |
| Volume Resistivity | 1.0E+2 | ohms·cm | IEC 60093 |
| Insulation Resistance | 1.0E+2 | ohms | IEC 60167 |
| **Flammability** | **Nominal Value** | **Unit** | **Test Method** |
| Flame Rating | | | UL 94 |
| 1.60 mm | HB | | |
| 3.20 mm | HB | | |
| **Additional Information** | **Nominal Value** | | **Test Method** |
| ISO Shortname | PA12, MHZ, 18-060, 25GF | | ISO 1874 |
| **NOTE** | | | |
| 1. | 2nd Heating | | |

## 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