

Grilamid LV-23 X ESD

PA12-GF23

EMS-GRIVORY | a unit of EMS-CHEMIE AG

Product Texts

Product designation according to ISO 1874:
PA12, MHRZ, 18-060, GF23+C

| Mechanical properties | dry / cond | Unit | Test Standard |
|--|-----------------|-------------------|---------------|
| Tensile Modulus | - / 5500 | MPa | ISO 527-1/-2 |
| Stress at break | - / 100 | MPa | ISO 527-1/-2 |
| Strain at break | - / 5 | % | ISO 527-1/-2 |
| Charpy impact strength (+23°C) | - / 55 | kJ/m ² | ISO 179/1eU |
| Charpy impact strength (-30°C) | - / 35 | kJ/m ² | ISO 179/1eU |
| Charpy notched impact strength (+23°C) | - / 10 | kJ/m ² | ISO 179/1eA |
| Charpy notched impact strength (-30°C) | - / 8 | kJ/m ² | ISO 179/1eA |

| Mechanical properties (TPE) | dry / cond | Unit | Test Standard |
|-----------------------------|----------------|------|---------------|
| Ball indentation hardness | - / 115 | MPa | ISO 2039-1 |

| Thermal properties | dry / cond | Unit | Test Standard |
|--|-----------------|-------|-----------------|
| Melting temperature (10°C/min) | 178 / - | °C | ISO 11357-1/-3 |
| Temp. of deflection under load (1.80 MPa) | 160 / - | °C | ISO 75-1/-2 |
| Temp. of deflection under load (8.00 MPa) | 110 / - | °C | ISO 75-1/-2 |
| Coeff. of linear therm. expansion (parallel) | 110 / - | E-6/K | ISO 11359-1/-2 |
| Coeff. of linear therm. expansion (normal) | 120 / - | E-6/K | ISO 11359-1/-2 |
| Burning Behav. at thickness h | HB / - | class | IEC 60695-11-10 |
| Thickness tested | 0.8 / - | mm | IEC 60695-11-10 |
| Max. usage temperature (long term) | 90 - 120 | °C | ISO 2578 |
| Max. usage temperature (short term) | 150 | °C | EMS |

| Electrical properties | dry / cond | Unit | Test Standard |
|-----------------------|-----------------|-------|---------------|
| Volume resistivity | - / 100 | Ohm*m | IEC 60093 |
| Surface resistivity | - / 1000 | Ohm | IEC 60093 |

| Other properties | dry / cond | Unit | Test Standard |
|---------------------|-----------------|-------------------|----------------|
| Water absorption | 1.2 / - | % | Sim. to ISO 62 |
| Humidity absorption | 0.5 / - | % | Sim. to ISO 62 |
| Density | 1230 / - | kg/m ³ | ISO 1183 |

| Rheo/Phys properties | dry / cond | Unit | Test Standard |
|------------------------------|----------------|------|-----------------|
| Molding shrinkage (parallel) | 0.3 / - | % | ISO 294-4, 2577 |
| Molding shrinkage (normal) | 1.0 / - | % | ISO 294-4, 2577 |

Characteristics

Processing

Injection Molding

Delivery form

Granules

Special Characteristics

Anti-static, High impact or impact modified, Improved UV resistance (outdoor use), Improved heat resistance

Regional Availability

North America, Europe, Asia Pacific, South and Central America, Near East/Africa

Product Attributes

Hydrolysis resistant

Automotive

Fuel systems