

Grilamid LVX-65H SST nat PA12-GF65

EMS-GRIVORY | a unit of EMS-CHEMIE AG

Product Texts

Product designation according to ISO 1874:

PA12, MHR, 18-190, GF65

| Mechanical properties | dry / cond | Unit | Test Standard |
|--|---------------|-------|---------------|
| Tensile Modulus | 19000 / 17000 | MPa | ISO 527-1/-2 |
| Stress at break | 210 / 185 | MPa | ISO 527-1/-2 |
| Strain at break | 2.5 / 2.5 | % | ISO 527-1/-2 |
| Charpy impact strength (+23°C) | 90 / 90 | kJ/m² | ISO 179/1eU |
| Charpy impact strength (-30°C) | 85 / 85 | kJ/m² | ISO 179/1eU |
| Charpy notched impact strength (+23°C) | 25 / 25 | kJ/m² | ISO 179/1eA |
| Charpy notched impact strength (-30°C) | 20 / 20 | kJ/m² | ISO 179/1eA |

| Mechanical properties (TPE) Ball indentation hardness | dry / cond - / 200 | Unit MPa | Test Standard ISO 2039-1 | |
|---|-----------------------|-------------|-----------------------------|--|
| Thermal properties | dry / cond | Unit | Test Standard | |

| 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) | 175 / - | °C | ISO 75-1/-2 |
| Temp. of deflection under load (8.00 MPa) | 160 / - | °C | ISO 75-1/-2 |
| Coeff. of linear therm. expansion (parallel) | 10 / - | E-6/K | ISO 11359-1/-2 |
| Coeff. of linear therm. expansion (normal) | 70 / - | 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 | - / 1E10 | Ohm*m | IEC 60093 |
| Surface resistivity | - / 1E11 | Ohm | IEC 60093 |
| Electric strength | 43 / 43 | kV/mm | IEC 60243-1 |
| Comparative tracking index | - / 600 | - | IEC 60112 |

| Other properties | dry / cond | Unit | Test Standard |
|---------------------|------------|-------|----------------|
| Water absorption | 0.8 / - | % | Sim. to ISO 62 |
| Humidity absorption | 0.4 / - | % | Sim. to ISO 62 |
| Density | 1700 / - | kg/m³ | ISO 1183 |

| Rheo/Phys properties | dry / cond | Unit | Test Standard |
|------------------------------|------------|------|-----------------|
| Molding shrinkage (parallel) | 0.1 / - | % | ISO 294-4, 2577 |
| Molding shrinkage (normal) | 0.3 / - | % | ISO 294-4, 2577 |

Characteristics

| Processing | Product Attributes |
|-------------------|---|
| Injection Molding | Improved flowability and demoulding |
| Delivery form | Automotive |
| Granules | Compressed air systems, Hydraulic systems, Automotive electr. and electronics, lighting, Powertrain and Chassis |

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Special Characteristics

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

Electricals & Electronics

Electrical appliances, Electrical equipment, Connectors, Mobile phones and other portable devices

Industry & Consumer goods

Housewares, Hydraulics & Pneumatics, Mechanical Engineering, Medical devices, Power transmission, Sanitary, water and gas supply, Sports & Leisure, Tools & Accessories