**Technical Data Sheet**

# SCHULAMID® 612 GF 30 HI H2

Polyamide 612
Engineering Plastics

| Product Description |
|---|
| 30% glass fiber reinforced and impact modified Polyamide 612, with electrical neutral heat stabilization and high strength after conditioning |

| General | | | |
|---|---|---|---|
| Filler / Reinforcement | • Glass Fiber, 30% Filler by Weight | | |
| Features | • Chemical Resistant<br>• Corrosion Resistant<br>• Fuel Resistant | • Good Dimensional Stability<br>• High Impact Resistance<br>• Low Temperature Toughness | • Low to No Water Absorption<br>• Oil Resistant |
| Processing Method | • Injection Molding | | |

| Physical | Dry | Conditioned | Unit | Test Method |
|---|---|---|---|---|
| Density | 1.25 | -- | g/cm³ | ISO 1183/A |
| **Mechanical** | **Dry** | **Conditioned** | **Unit** | **Test Method** |
| Tensile Modulus | 1.09E+6 (7500) | 870000 (6000) | psi (MPa) | ISO 527-2/1A/1 |
| Tensile Stress (Break) | 18100 (125) | 14500 (100) | psi (MPa) | ISO 527-2/1A/5 |
| Tensile Strain (Break) | 3.6 | 5.0 | % | ISO 527-2/1A/5 |
| Flexural Modulus [1] (73°F (23°C)) | 1.04E+6 (7200) | -- | psi (MPa) | ISO 178 |
| Flexural Stress [1] (73°F (23°C)) | 26800 (185) | -- | psi (MPa) | ISO 178 |
| Flexural Strain at Flexural Strength | | | | ISO 178 |
| 73°F (23°C) | 4.00 | -- | | |
| **Impact** | **Dry** | **Conditioned** | **Unit** | **Test Method** |
| Charpy Notched Impact Strength | | | | ISO 179/1eA |
| -22°F (-30°C) | 5.7 (12) | -- | ft·lb/in² (kJ/m²) | |
| 73°F (23°C) | 10 (22) | 9.5 (20) | ft·lb/in² (kJ/m²) | |
| Charpy Unnotched Impact Strength | | | | ISO 179/1eU |
| -22°F (-30°C) | 43 (90) | -- | ft·lb/in² (kJ/m²) | |
| 73°F (23°C) | 40 (85) | 33 (70) | ft·lb/in² (kJ/m²) | |
| **Thermal** | **Dry** | **Conditioned** | **Unit** | **Test Method** |
| Heat Deflection Temperature | | | | |
| 66 psi (0.45 MPa), Unannealed | 410 (210) | -- | °F (°C) | ISO 75-2/Bf |
| 264 psi (1.8 MPa), Unannealed | 383 (195) | -- | °F (°C) | ISO 75-2/Af |
| Vicat Softening Temperature | | | | |
| -- | 410 (210) | -- | °F (°C) | ISO 306/A50 |
| -- | 329 (165) | -- | °F (°C) | ISO 306/B50 |

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| Electrical | Dry | Conditioned | Unit | Test Method |
|---|---|---|---|---|
| Surface Resistivity | > 1.0E+15 | > 1.0E+12 | ohms | IEC 60093 |
| Volume Resistivity | > 1.0E+13 | > 1.0E+10 | ohms·m | IEC 62631-3-1 |
| **Flammability** | **Dry** | **Conditioned** | **Unit** | **Test Method** |
| Burning Rate | | | | |
| 0.0787 in (2.00 mm) | < 3.9 (< 100) | -- | in/min (mm/min) | ISO 3795 |
| 0.0787 in (2.00 mm) | < 3.9 (< 100) | -- | in/min (mm/min) | FMVSS 302 |
| Flammability Classification | | | | IEC 60695-11-10, -20 |
| 0.06 in (1.5 mm) | HB | -- | | |
| 0.12 in (3.0 mm) | HB | -- | | |

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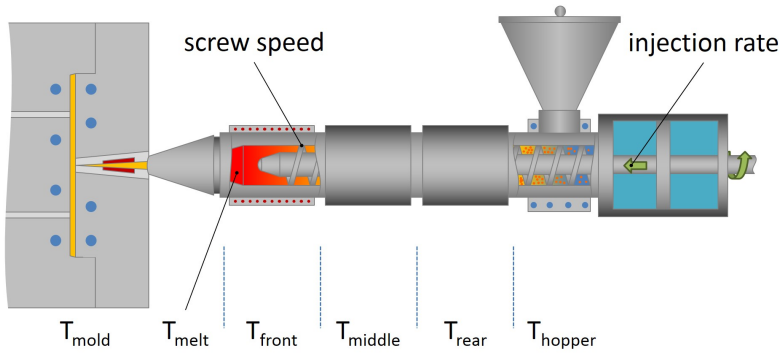


| Injection | Dry (English) | Dry (SI) |
|---|---|---|
| Drying Temperature | 176 °F | 80 °C |
| Drying Time | 3.0 to 4.0 hr | 3.0 to 4.0 hr |
| Suggested Max Moisture | 0.04 to 0.10 % | 0.04 to 0.10 % |
| Suggested Max Regrind | 20 % | 20 % |
| Processing (Melt) Temp | 464 to 536 °F | 240 to 280 °C |
| Mold Temperature | 122 to 194 °F | 50 to 90 °C |

**Notes**

[1] 0.079 in/min (2.0 mm/min)

**Notes**

These are typical property values not to be construed as specification limits.