

Technical Data Sheet

Schulamid 6 GF 30 HI K1871

Polyamide 6
LyondellBasell Industries
Engineering Plastics

Product Description

30% glass fiber reinforced high impact Polyamide 6, customer specific grade

General

| | | | |
|------------------------|-------------------------------------|--------------------------------------|-----------------|
| Filler / Reinforcement | • Glass Fiber, 30% Filler by Weight | | |
| Features | • Good Flow • Good Toughness | • High Strength • Impact Modified | • Oil Resistant |
| UL File Number | • E86615 | | |
| Processing Method | • Injection Molding | | |

Physical

| | Dry | Conditioned | Unit | Test Method |
|----------------------------------|------|-------------|-------------------|-------------|
| Density | 1.31 | -- | g/cm ³ | ISO 1183/A |
| Water Absorption | | | | ISO 62 |
| Equilibrium, 73°F (23°C), 50% Rh | 1.9 | -- | % | |

Mechanical

| | Dry | Conditioned | Unit | Test Method |
|------------------------|-------------------|------------------|--------------|----------------|
| Tensile Modulus | 1.20E+6 (8300) | 725000 (5000) | psi (MPa) | ISO 527-1/1A/1 |
| Tensile Stress (Break) | 19600 (135) | 12300 (85.0) | psi (MPa) | ISO 527-2/1A/5 |
| Tensile Strain (Break) | 4.0 | 9.0 | % | ISO 527-2/1A/5 |

Impact

| | Dry | Conditioned | Unit | Test Method |
|----------------------------------|-------------|-------------|---|-------------|
| Charpy Notched Impact Strength | | | | ISO 179/1eA |
| -22°F (-30°C) | 5.7 (12) | -- | ft·lb/in ² (kJ/m ²) | |
| 73°F (23°C) | 8.6 (18) | 14 (30) | ft·lb/in ² (kJ/m ²) | |
| Charpy Unnotched Impact Strength | | | | ISO 179/1eU |
| -22°F (-30°C) | 37 (78) | -- | ft·lb/in ² (kJ/m ²) | |
| 73°F (23°C) | 40 (85) | 45 (95) | ft·lb/in ² (kJ/m ²) | |

Thermal

| | Dry | Conditioned | Unit | Test Method |
|-----------------------------------|--------------|-------------|------------|-------------|
| Deflection Temperature Under Load | | | | |
| 66 Psi (0.45 Mpa), Unannealed | 419 (215) | -- | °F (°C) | ISO 75-2/Bf |
| 264 Psi (1.8 Mpa), Unannealed | 392 (200) | -- | °F (°C) | ISO 75-2/Af |
| Vicat Softening Temperature | | | | |
| -- | 401 (205) | -- | °F (°C) | ISO 306/B50 |
| -- | 428 (220) | -- | °F (°C) | ISO 306/A50 |



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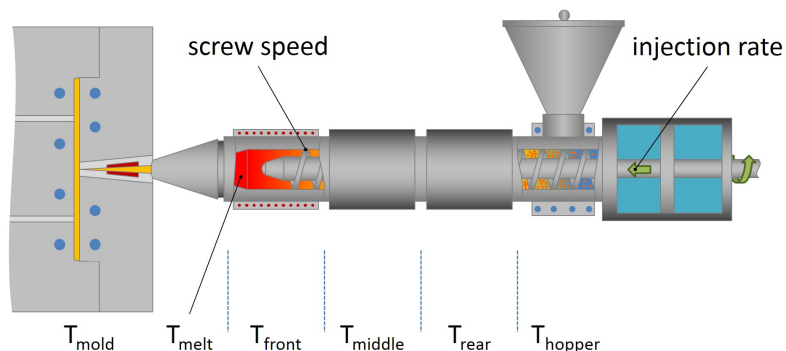
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| Electrical | Dry | Conditioned | Unit | Test Method |
|------------------------------|---------------|-------------|--------------------|-------------------------|
| Surface Resistivity | > 1.0E+15 | -- | ohms | IEC 60093 |
| Volume Resistivity | > 1.0E+13 | -- | ohms·m | IEC 62631-3-1 |
| Comparative Tracking Index | 550 | -- | V | IEC 60112 |
| Flammability | Dry | Conditioned | Unit | Test Method |
| Burning Rate | | | | |
| 0.0787 In (2.00 Mm) | 1.8 (45) | -- | in/min (mm/min) | ISO 3795 |
| 0.0787 In (2.00 Mm) | 1.8 (45) | -- | 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 | -- | | |
| Glow Wire Flammability Index | 1200 (650) | -- | °F (°C) | IEC 60695-2-12 |

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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 % |
| Processing (Melt) Temp | 482 to 536 °F | 250 to 280 °C |
| Mold Temperature | 140 to 212 °F | 60 to 100 °C |

Notes

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