BASF
We create chemistry

ALBIS

# Ultramid® KR 4450 gr

PA6-(GF+MX)45 BASF

| Rheological properties | dry / cond | Unit | Test Standard |
|---|---|---|---|
| **ISO Data** | | | |
| Melt volume-flow rate, MVR | 35 / * | cm³/10min | ISO 1133 |
| Temperature | 275 / * | °C | - |
| Load | 5 / * | kg | - |

| Mechanical Properties | dry / cond | Unit | Test Standard |
|---|---|---|---|
| **ISO Data** | | | |
| Tensile Modulus | 8000 / 4000 | MPa | ISO 527 |
| Stress at Break | 100 / 65 | MPa | ISO 527 |
| Strain at Break | 2.5 / 4.5 | % | ISO 527 |
| Impact Strength (Charpy), +23°C | 40 / 60 | kJ/m² | ISO 179/1eU |
| Notched Impact Strength (Charpy), +23°C | 3.8 / 5 | kJ/m² | ISO 179/1eA |
| Flexural Modulus (23°C) | 7500 / - | MPa | ISO 178 |
| Notched Impact Strength (Izod), 23°C | 3.5 / 4.5 | kJ/m² | ISO 180/1A |

| Thermal Properties | dry / cond | Unit | Test Standard |
|---|---|---|---|
| **ISO Data** | | | |
| Melting Temperature (10°C/min) | 220 / * | °C | ISO 11357-1/-3 |
| Temp. of deflection under load (1.80 MPa) | 180 / * | °C | ISO 75-1/-2 |
| Temp. of deflection under load (0.45 MPa) | 215 / * | °C | ISO 75-1/-2 |
| Burning Behav. at 1.5 mm Nom. Thickn. | V-2 / * | class | UL 94 |
| Thickness tested | 1.6 / * | mm | - |

| Electrical Properties | dry / cond | Unit | Test Standard |
|---|---|---|---|
| **ISO Data** | | | |
| Relative permittivity, 1MHz | 4.5 / 5 | - | IEC 62631-2-1 |
| Dissipation Factor, 1MHz | 200 / 1000 | E-4 | IEC 62631-2-1 |
| Volume Resistivity | 1E13 / 1E10 | Ohm*m | IEC 62631-3-1 |
| Surface Resistivity | * / 1E11 | Ohm | IEC 62631-3-2 |
| Comparative tracking index | 600 / - | - | IEC 60112 |

| Other Properties | dry / cond | Unit | Test Standard |
|---|---|---|---|
| **ISO Data** | | | |
| Water Absorption | 6.1 / * | % | Sim. to ISO 62 |
| Humidity absorption | 1.7 / * | % | Sim. to ISO 62 |
| Density | 1500 / - | kg/m³ | ISO 1183 |
| Bulk density | 700 | kg/m³ | - |

| Processing Recommendation Injection Molding | Value | Unit | Test Standard |
|---|---|---|---|
| Melt temperature | 280 - 300 | °C | - |
| Mold temperature | 80 - 90 | °C | - |

## Characteristics

**Processing**
Injection Molding

**Special Characteristics**
Flame retardant, Halogen-free, Phosphorus-free

**Delivery form**
Pellets

**Features**
Low Smoke