

Ultramid® Exp. F3S Balance
PA66

BASF

| Rheological properties | dry / cond | Unit | Test Standard |
|-----------------------------|------------|-----------|-----------------|
| ISO Data | | | |
| Melt volume-flow rate, MVR | 132 / * | cm³/10min | ISO 1133 |
| Temperature | 275 / * | °C | - |
| Load | 5 / * | kg | - |
| Molding shrinkage, parallel | 0.9 / * | % | ISO 294-4, 2577 |
| Molding shrinkage, normal | 0.3 / * | % | ISO 294-4, 2577 |

| Mechanical Properties | dry / cond | Unit | Test Standard |
|---|---------------------|-------|---------------|
| ISO Data | | | |
| Tensile Modulus | 1400 / 480 | MPa | ISO 527 |
| Yield stress | 43 / 26 | MPa | ISO 527 |
| Yield strain | 4.2 / 24 | % | ISO 527 |
| Nominal strain at break | 326 / 335 | % | ISO 527 |
| Impact Strength (Charpy), +23°C | no break / no break | kJ/m² | ISO 179/1eU |
| Impact Strength (Charpy), -30°C | no break / no break | kJ/m² | ISO 179/1eU |
| Notched Impact Strength (Charpy), +23°C | 5.6 / 160 | kJ/m² | ISO 179/1eA |
| Notched Impact Strength (Charpy), -30°C | 6.1 / 6.8 | kJ/m² | ISO 179/1eA |

| Thermal Properties | dry / cond | Unit | Test Standard |
|---|------------|------|----------------|
| ISO Data | | | |
| Melting Temperature (10°C/min) | 198 / * | °C | ISO 11357-1/-3 |
| Temp. of deflection under load (1.80 MPa) | 40 / * | °C | ISO 75-1/-2 |
| Temp. of deflection under load (0.45 MPa) | 46 / * | °C | ISO 75-1/-2 |

| Other Properties | dry / cond | Unit | Test Standard |
|------------------|------------|-------|---------------|
| ISO Data | | | |
| Density | 1060 / - | kg/m³ | ISO 1183 |
| Bulk density | 700 | kg/m³ | - |

| Material Specific Properties | dry / cond | Unit | Test Standard |
|------------------------------|------------|-------|---------------------|
| ISO Data | | | |
| Viscosity number | 154 / * | cm³/g | ISO 307, 1157, 1628 |

| Optical Properties | Value | Unit | Test Standard |
|---------------------|---------------------|------|---------------|
| ASTM Data | | | |
| Haze | 1.3 ^[1] | % | ASTM D 1003 |
| Light Transmittance | 92.9 ^[2] | % | ASTM D 1003 |
| 2: d = 1 mm | | | |

| Processing Recommendation Injection Molding | Value | Unit | Test Standard |
|---|-----------|------|---------------|
| Melt temperature | 220 - 250 | °C | - |
| Mold temperature | 20 - 40 | °C | - |

Characteristics

Processing

Injection Molding

Features

Good Adhesion

Delivery form

Pellets

Chemical Resistance

General Chemical Resistance

Special Characteristics

Transparent

Applications

Sports Equipment

Disclaimer

Liability Exclusion

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