

**Ultramid® Exp. F3Z Balance**  
**PA66**

BASF

| Rheological properties      | dry / cond | Unit      | Test Standard   |
|-----------------------------|------------|-----------|-----------------|
| <b>ISO Data</b>             |            |           |                 |
| Melt volume-flow rate, MVR  | 132 / *    | cm³/10min | ISO 1133        |
| Temperature                 | 275 / *    | °C        | -               |
| Load                        | 11 / *     | kg        | -               |
| Molding shrinkage, parallel | 0.6 / *    | %         | ISO 294-4, 2577 |
| Molding shrinkage, normal   | 0.5 / *    | %         | ISO 294-4, 2577 |

| Mechanical Properties                   | dry / cond          | Unit  | Test Standard |
|---|---------------------|-------|---------------|
| <b>ISO Data</b>                         |                     |       |               |
| Tensile Modulus                         | 1000 / 440          | MPa   | ISO 527       |
| Yield stress                            | 29 / 22             | MPa   | ISO 527       |
| Yield strain                            | 4.3 / 27            | %     | ISO 527       |
| Nominal strain at break                 | 250 / 198           | %     | 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 | 106 / no break      | kJ/m² | ISO 179/1eA   |
| Notched Impact Strength (Charpy), -30°C | 26 / 27             | kJ/m² | ISO 179/1eA   |

| Thermal Properties                        | dry / cond | Unit | Test Standard  |
|---|------------|------|----------------|
| <b>ISO Data</b>                           |            |      |                |
| Melting Temperature (10°C/min)            | 194 / *    | °C   | ISO 11357-1/-3 |
| Temp. of deflection under load (1.80 MPa) | 36 / *     | °C   | ISO 75-1/-2    |
| Temp. of deflection under load (0.45 MPa) | 41 / *     | °C   | ISO 75-1/-2    |

| Other Properties | dry / cond | Unit  | Test Standard |
|------------------|------------|-------|---------------|
| <b>ISO Data</b>  |            |       |               |
| Density          | 1030 / -   | kg/m³ | ISO 1183      |
| Bulk density     | 700        | kg/m³ | -             |

| 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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