

Technical information

preliminary

TEREZ[®] GT3 300 H G50 SF

PA66 Blend with partial aromatic share, 50% glass fiber content and heat stabilizer improved flow characteristics



TECHNICAL DATA SHEET

Product text

For all kind of injection molding parts with high requirements on strength

Preliminary data

| Properties | Value | Unit | Test method |
|---------------------------------------------------|--------|-------------------|-------------|
| Density | 1,5600 | g/cm ³ | ISO 1183 |
| Impact strength Charpy (Notched 23°C), dry | 15 | kJ/m ² | ISO 179 |
| Impact strength Charpy (Notched 23°), conditioned | 15 | kJ/m ² | ISO 179 |
| Impact strength Charpy 23°C, dry | 94 | kJ/m ² | ISO 179 |
| Impact strength Charpy (23°), conditioned | NB | kJ/m ² | ISO 179 |
| Tensile-modulus, dry | 16500 | MPa | ISO 527 |
| Tensile-modulus, conditioned | 15500 | MPa | ISO 527 |
| Tensile stress at break, dry | 235 | MPa | ISO 527 |
| Tensile stress at break, conditioned | 210 | MPa | ISO 527 |
| Elongation at break, dry | 3,00 | % | ISO 527 |
| Elongation at break, conditioned | 3,00 | % | ISO 527 |
| HDT 0,45 MPa | 250 | °C | ISO 75 |
| HDT 1,80 MPa | 240 | °C | ISO 75 |
| Melting point | 260 | °C | ISO 11357-3 |
| CTI | 600 | V | IEC 60112 |
| Electric strength | 33,00 | kV/mm | IEC 60243-1 |
| Burning Behav. at thickness h | HB | class | UL 94 |
| Thickness tested | 1,6 | mm | UL 94 |
| UL recognition | - | | UL 94 |
| Water absorption | 4,00 | % | ISO 62 |
| Moisture absorption | 1,40 | % | ISO 62 |

PROCESSING DATA SHEET

Processing guidelines for injection molding of TEREZ GT3 300 H G50 SF

The processing data sheet provides guidelines about processing as well as pre-drying.

MATERIAL PREPARATION

Storage

Store in a dry place protected from direct sunlight. Avoid all sources of ignition like extreme heat, sparks, or open flame.

Drying

For the manufacturing of mechanically and optically optimal injection molding parts, we recommend following pre-drying conditions according to the table below. If the container is open (wet granules), the drying time can be extended accordingly.

Dry air dryer

| | |
|-------------|-------------|
| Temperature | 80°C |
| Time | 4 - 8 hours |
| Due point | -40°C |

Residual moisture

<= 0.05% (recommended)
max. 0.1% (standard)

MACHINE REQUIREMENTS

PROCESSING

Basic settings

The following basic settings are generally to be selected:

Temperatures

Processing temperatures

| | |
|--------|-------------|
| Hopper | 60 - 80°C |
| Center | 260 - 290°C |
| Nozzle | 270 - 300°C |

Mold temperature

| | |
|-------|------------|
| Temp. | 80 - 120°C |
|-------|------------|

Residence time

You should try to keep the residence time short, especially at high temperatures to avoid material degradation.

Residence times in the cylinder

max. 275 °C / 8 min.

Instructions for cleaning

The aggregate can be cleaned by using low MFI polypropylene. You can also use standard cleaning granulate.