

# Technical information

preliminary

## TEREZ<sup>®</sup> HT 100 H G50 W

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Standard type with medium viscosity partly aromatic  
Polyamid with 50% glass fiber content and heat stabilized  
This Product is suitable for drinking water contact.



## TECHNICAL DATA SHEET

### Product text

For all kind of injection molding parts with high stiffness at excellence thermal stability, low moisture absorption and which a drinking water approval is needed.

### Preliminary data

| Properties                                        | Value  | Unit              | Test method |
|---------------------------------------------------|--------|-------------------|-------------|
| Density                                           | 1,6300 | g/cm <sup>3</sup> | ISO 1183    |
| Impact strength Charpy (Notched 23°C), dry        | 11     | kJ/m <sup>2</sup> | ISO 179     |
| Impact strength Charpy (Notched 23°), conditioned | 11     | kJ/m <sup>2</sup> | ISO 179     |
| Impact strength Charpy 23°C, dry                  | 80     | kJ/m <sup>2</sup> | ISO 179     |
| Impact strength Charpy (23°), conditioned         | 80     | kJ/m <sup>2</sup> | ISO 179     |
| Tensile-modulus, dry                              | 19000  | MPa               | ISO 527     |
| Tensile-modulus, conditioned                      | 18500  | MPa               | ISO 527     |
| Tensile stress at break, dry                      | 240    | MPa               | ISO 527     |
| Tensile stress at break, conditioned              | 220    | MPa               | ISO 527     |
| Elongation at break, dry                          | 1,80   | %                 | ISO 527     |
| Elongation at break, conditioned                  | 1,80   | %                 | ISO 527     |
| HDT 0,45 MPa                                      | 295    | °C                | ISO 75      |
| HDT 1,80 MPa                                      | 285    | °C                | ISO 75      |
| Melting point                                     | 330    | °C                | ISO 11357-3 |
| CTI                                               | 550    | V                 | IEC 60112   |
| Electric strength                                 | 30,00  | 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                                  | 3,00   | %                 | ISO 62      |
| Moisture absorption                               | 1,30   | %                 | ISO 62      |

## PROCESSING DATA SHEET

### Processing guidelines for injection molding of TEREZ HT 100 H G50 W

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 - 12 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:

##### Processing temperatures

|        |             |
|--------|-------------|
| Hopper | 60 - 80°C   |
| Center | 330 - 340°C |
| Nozzle | 335 - 350°C |

##### Mold temperature

|       |             |
|-------|-------------|
| Temp. | 140 - 160°C |
|-------|-------------|

#### Temperatures

##### 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. 330 °C / 8 min.

##### Instructions for cleaning

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