BARLOG Plastics
Mehr aus Polymer.

# Technical data
# Privat: KEBATER PBT BF250

PBT-GF50, PBT, 50% glass fiber reinforced, Approved for food contact applications

**Polymer:** PBT

**ISO designation:** PBT-GF50-FC

**Productgroup:** PBT

**Brief description of the product family:**

KEBATER is the trade name of our range of thermoplastic polyesters. KEBATER products are characterized by good stiffness and strength, excellent electrical properties, advantageous fire properties and a good price-performance ratio. The product range includes PBT and PBT blends in different variants: unreinforced and glass fiber reinforced, impact modified, flame retardant, warp optimized as well as other compounds tailored to special requirements.

**Properties:**

dimensionally stable, good chemical resistance, Good electrical properties, good gliding properties, good aging behavior, High strength, High stiffness, High wear resistance, semi-crystalline, approved for food contact (EU and FDA)

**Typical areas of application:**

Connecting elements, Controls, Fasteners, Hardware, Actuating elements, Cover, Housing, Handles, industrial goods, Pumps and motors, Pump housing, Switch, Plug, Structural components, Carrier

**Industries:**

Automotive, Electrical and electronics industry, Household appliances, Industry, Food processing industry, Mechanical Engineering, Medical Technology, Sanitary industry

## Physical properties

| | |
|---|---|
| Moisture absorption 23°C/50% r.h. in %. \| in Anlehnung an ISO 62 | 0.10 |
| Density in kg/m³ \| ISO 1183-1 | 1700.00 |

## Mechanical properties

| | |
|---|---|
| E-modulus in MPa \| ISO 527-1 | 15000 |
| Breaking stress in MPa \| ISO 527-1 | 160.0 |
| Elongation at break in % \| ISO 527-1 | 1.8 |
| Impact strength (Charpy) at 23°C in kJ/m² \| ISO 179-1eU | 55.0 |
| Impact strength (Charpy) at -30°C in kJ/m² \| ISO 179-1eU | 55.0 |
| Notched impact strength (Charpy) at 23°C in kJ/m² \| ISO 179-1eA | 11.5 |
| Notched impact strength (Charpy) at -30°C in kJ/m² \| ISO 179-1eA | 12.0 |

## Thermal properties

| | |
|---|---|
| Melting temperature (DSC, 10°C/min) in °C \| ISO 11357-1/-3 | 225.0 |
| Heat deflection temperature HDT (1.80 MPa) in °C \| ISO 75-1/-2 | 205.0 |
| Heat deflection temperature HDT (0.45 MPa) in °C \| ISO 75-1/-2 | 220.0 |

## Thermal properties

| | |
|---|---|
| Coefficient of thermal expansion in flow direction in E-6/K \| ISO 11359-1/-2 | 40.0 |
| Coefficient of thermal expansion transverse to the flow direction in E-6/K \| ISO 11359-1/-2 | 40.0 |
| Fire behavior (0.8 mm wall thickness) \| IEC 60695-11-10 | HB |
| UL listing \| | ja |

## Electrical properties

| | |
|---|---|
| Contact resistance in Ohm*m \| IEC 60093 | 1e+17 |
| Surface resistivity in ohms \| IEC 60093 | 1e+15 |

**Processing instructions:**

**Pre-drying:**

Dryer type: dry air dryer.
Temperature: 100 – 120°C
Drying time: 2 – 4 h
Residual moisture: < 0.02%.

**Temperatures:**

Melt temperature: 245 – 260°C
Mold temperature: 80 – 120°C
Back pressure: max. 40 bar (specific)
Injection speed: medium to high

**Legal notices:**

The information in this data sheet is based on our current knowledge and experience. Due to the wide range of possible influences during processing and application of our products, they do not exempt the processor from carrying out his own tests and trials. A legally binding assurance of certain properties or suitability for a specific application cannot be derived from our information.

* FE products are development products which are still in the trial phase. Technical data may still change in the course of product and process development. No final decision has yet been made on the commercialization of FE products. We reserve the right to discontinue the production of FE products without giving further reasons.

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