

Technical data KEBALLOY ECO FE 220501 PBT/PET (Development product*)

KEBALLOY ECO FE 220501 PBT/PET is a 20% glass fibre reinforced PBT/PET blend with 30% post-consumer recycled content (R-PET).

Polymer: PBT/PET

ISO designation: PBT/PET-GF20(REC)

Productgroup:

Brief description of the product family:

The name KEBALLOY ECO stands for a product range of engineering plastics and high-performance compounds based on post-consumer or post-industrial recyclate. KEBALLOY ECO compounds enable significant CO2 savings compared to virgin materials and meet the highest requirements in terms of product properties and their uniformity from batch to batch. KEBALLOY ECO compounds also enable customer- or application-specific microcycles of engineering plastic parts and are thus a valuable contribution on the way to a circular plastics economy.

Properties:

dimensionally stable, good chemical resistance, good gliding properties, High stiffness, High wear resistance, semi-crystalline

Typical areas of application:

Covers, Electronic components, Food packaging, Connecting elements

Industries:

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

Physical properties	
Density in kg/m³ ISO 1183-1	1470

Mechanical properties	
E-modulus in MPa ISO 527-1	7500
Breaking stress in MPa ISO 527-1	120.0
Elongation at break in % ISO 527-1	2.5
Impact strength (Charpy) at 23°C in kJ/m² ISO 179-1eU	30.0
Notched impact strength (Charpy) at 23°C in kJ/m² ISO 179-1eA	7.0

Rheological properties	
Melt flow rate MFR in g/10min ISO 1133	42.0
Melt flow rate MFR (test condition)	270°C / 2,16kg

Thermal properties	
Melting temperature (DSC, 10°C/min) in °C ISO 11357-1/-3	225

Processing instructions:

Pre-drying:

Dryer type: dry air dryer Temperature: 100 – 120°C

Drying time: 2 - 4 h

Moisture content during processing: < 0.02%.

Recommended basic settings:

Melt temperature: 255 - 275°C Mold temperature: 80 - 120 °C Back pressure: max. 40 bar (spec.) Injection speed: medium to high

Machine selection:

Screw: 3-zone screw with non-return valve Nozzle: Open nozzle or shut-off nozzle

Wear protection: Wear protected according to machine manufacturer's recommendation, suitable for

processing fiber reinforced plastics

Injection unit: Shot volume = 50-80% of the maximum metering volume

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 manufacture of FE products without giving further reasons.

Created at: 04.05.2024

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