

Technical data KEBALLOY ECO XB 220103 R-POM black 9001

POM copolymer unreinforced, medium viscosity, black for injection molding, post-industrial recyclate

Polymer: POM

ISO designation: POM-C(REC)

Productgroup: POM, Recycling Compounds

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 spring properties, good gliding properties, High strength, High wear resistance, semi-crystalline

Typical areas of application:

Connecting elements, Distributor, Fittings, Gears, Controls, Fasteners, Cover, Spring elements, Pipe fitting, Housing, Sliding elements, Plain bearing, Piston, Cables and connectors for media-carrying systems, media-carrying components, Rollers, Valves

Industries:

Automotive, Household appliances, Mechanical Engineering, Sanitary industry

Physical properties	
Density in kg/m ³ ISO 1183-1	1400.00

Mechanical properties	
E-modulus in MPa ISO 527-1	2700
Yield stress in MPa ISO 527-1	60
Elongation at yield in % ISO 527-1	9.0
Impact strength (Charpy) at 23°C in kJ/m ² ISO 179-1eU	100.0
Notched impact strength (Charpy) at 23°C in kJ/m ² ISO 179-1eA	6.5

Rheological properties	
Melt flow rate MFR (test condition)	190°C / 2,16kg
Melt flow rate MFR in g/10min ISO 1133	9.0

Thermal properties	
Melting temperature (DSC, 10°C/min) in °C ISO 11357-1/-3	166.0

Processing instructions: Pre-drying:

(May be required to remove surface moisture). Dryer type: Dry air dryer Temperature: 80 - 100°C Drying time: 2 - 4 h

Temperatures:

Melt temperature: 180 – 210°C Mold temperature: 60 – 120°C (general guideline for technical parts: min. 90°C) Back pressure (spec.): 10 – 40 bar Injection speed: medium Injection pressure: 600 – 1200 bar (depending on part and gate geometry) Holding pressure: 600 – 1200 bar (depending on part and gate geometry)

General processing instructions:

The residence time of the melt in the screw antechamber should be kept as short as possible. In case of longer downtimes, an empty spraying of barrel and hot runner is necessary.

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.

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