

# MAKROPLUS® CC 1500/PBT

Electroconductive concentrate



**MAKROPLUS® CC 1500/PBT** is an electroconductive concentrate based on PBT and highly electroconductive carbon black **CHEZACARB® AC**.

**MAKROPLUS® CC 1500/PBT** is used in applications where permanent antistatic or electroconductive properties are required (e.g. electrotechnical components and parts, sheets and containers).

PROPERTY	UNIT	TYPICAL VALUE	TESTING STANDARD
MFI (275 °C, 10 kg)	g/10 min	0.05	ISO 1133
Density	g/cm <sup>3</sup>	1.37	ISO 1183
Volume Resistivity	Ω.cm	<10*	ASTM D257
Tensile Strength	MPa	53	ISO 527
Elongation at Break	%	1.5	ISO 527
Flexural Modulus	MPa	3450	ISO 178

\* measured on extruded sheets (thickness 1 mm)

**MAKROPLUS® CC 1500/PBT** can be blended with pure PBT or used in blends with PET or PC to achieve optimal electrical conductivity (see the graph below).

**MAKROPLUS® CC 1500/PBT** is suitable for extrusion and injection moulding using common processing equipment.

Carbon black's structure is sensitive to high shearing forces. Too much shear stress during processing can damage the structure of carbon black and reduce its electrical conductivity. Excessive shear forces should therefore be avoided.

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## DRYING

Pre-drying is not necessary before processing. If required, the product should be dried at 110 °C for 4 hrs.

## PROCESSING

**EXTRUSION:** As a general guide, the recommended melt temperature is 225–240 °C during extrusion. Extrusion temperature should be adapted to the equipment, manufactured product and the concentration of **MAKROPLUS® CC 1500/PBT**.

## INJECTION MOULDING:

As a general guide, the recommended temperature is 240–260 °C (barrel/nozzle) and 80–120 °C mould temperature. Real processing conditions depend on the machine which is used, injection moulded part and on the concentration of **MAKROPLUS® CC 1500/PBT**.

## PACKAGING

**MAKROPLUS® CC 1500/PBT** is supplied as pellets (size 2–4 mm) packed in 25 kg PE bags. Larger quantities can be provided in sacks at the customer's request.

## STORAGE

The product should be stored in dry conditions at temperatures below 40 °C and protected from UV light. **MAKROPLUS® CC 1500/PBT** can be stored for two years in these conditions. After two years, the properties of the product should be tested.

## SAFETY

**MAKROPLUS® CC 1500/PBT** is not recommended for use in any applications with direct contact with food. Despite the concentrate containing no dangerous substances, the product should be handled according to the general rules for handling chemicals. Before processing, please refer to the Material Safety Data Sheet.

The information in this data sheet indicates the typical values obtained by our company and should not be regarded as a specification. These values do not represent a substitute for testing which should be done by the customer.

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