MAKROPLUS® CC 1500/HDPE 03

Electroconductive concentrate

MAKROPLUS® CC 1500/HDPE 03 is an electroconductive concentrate based on HDPE and highly electroconductive carbon black **CHEZACARB® AC.**

MAKROPLUS® CC 1500/HDPE 03 is used in applications where permanent antistatic or electroconductive properties are required (e.g. ESD films, foils, packaging).

PROPERTY	UNIT	TYPICAL VALUE	TESTING STANDARD
MFI (190 °C, 21 kg)	g/10 min	1.5	ISO 1133
Density	g/cm^3	N/A	ISO 1183
Volume Resistivity	Ω.cm	5*	ASTM D257
Tensile Strength	MPa	35	ISO 527
Elongation at Break	%	6	ISO 527
Flexural Modulus	MPa	1550	ISO 178

*** measured on extruded sheets (thickness 1 mm)**

MAKROPLUS® CC 1500/HDPE 03 can be blended with HDPE to achieve optimal electrical conductivity (see the graph below).

MAKROPLUS® CC 1500/HDPE 03 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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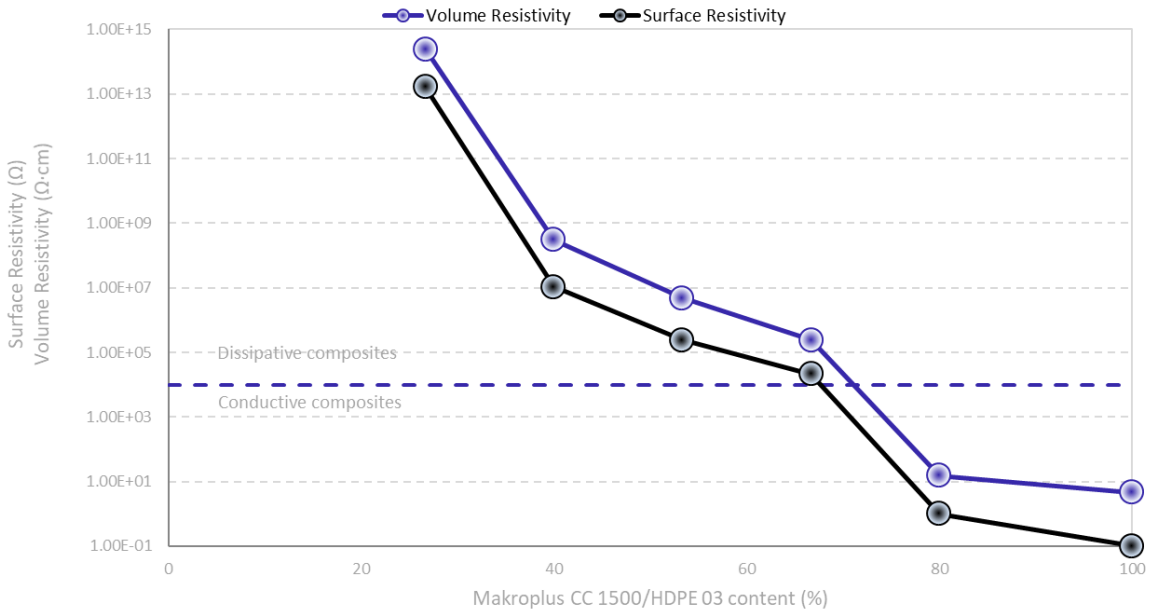
MAKROPLUS® CC 1500/HDPE 03

Volume Resistivity as a function of **Makroplus® CC 1500/HDPE 03** content
measured on extruded sheets: thickness 1 mm



DRYING

Pre-drying is not necessary before processing. If required, the product should be dried at 75 °C for 2–4 hrs.

PROCESSING

EXTRUSION: As a general guide, the recommended melt temperature is 180–200 °C during extrusion. Extrusion temperature should be adapted to the equipment, manufactured product and the concentration of **MAKROPLUS® CC 1500/HDPE 03.**

INJECTION MOULDING:

As a general guide, the recommended temperature is 190–210 °C (barrel/nozzle) and 40 °C mould temperature. Real processing conditions depend on the machine which is used, injection moulded part and on the concentration of **MAKROPLUS® CC 1500/HDPE 03.**

PACKAGING

MAKROPLUS® CC 1500/HDPE 03 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/HDPE 03** can be stored for two years in these conditions.
After two years, the properties of the product should be tested.

SAFETY

MAKROPLUS® CC 1500/HDPE 03 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.

This information represents our current knowledge on this product and may be revised as new information becomes available. Since we cannot anticipate every end use of the product, our company cannot offer any warranties in connection with any of the information given above. Nothing listed here may be considered a licence or recommendation to infringe any patent rights. This product is not intended for direct contact with food or drugs or for medical use, which requires permanent implantation in the human body.

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