

CABELEC® CA6132 CONDUCTIVE COMPOUND

Product highlights

CABELEC CA6132 electrically conductive compound is made from conductive carbon black dispersed in a modified HDPE resin. Its electrical and mechanical properties are not impacted by normal atmospheric conditions.

Key applications

CABELEC CA6132 conductive compound is used in transport, packaging and product handling applications such as the handling and packaging of explosive powders, pigments and dangerous liquids, where it is desirable to mitigate the hazard of electrostatic discharge. Typical applications are jerrycans, drums and other containers used in transportation of hazardous materials.

Processing

Pre-drying

CABELEC CA6132 conductive compound absorbs very little moisture from the atmosphere during normal storage and usage conditions. Therefore, pre-drying of the compound before processing can usually be avoided. Nevertheless, for critical applications, if the compound is stored outside and/or used in climates with high relative humidity, it is advisable to pre-dry the material. Typically, 2 - 3 hours in a dryer at 90°C is sufficient time to reduce the moisture content to an acceptable level.

Blow molding

CABELEC CA6132 conductive compound can be processed on conventional extrusion blow molding equipment. It should be processed under low shear conditions to promote good electrical and mechanical properties. Extrusion temperatures should be adapted to the nature of the equipment and the manufactured article to give optimum extrusion quality. As general guidance, temperatures of 190-230°C have been used successfully on extrusion lines. Temperatures above 250°C should be avoided.

To promote good electrical and mechanical properties of the material it is nevertheless strongly advised to avoid high shear mixing.

The information given in this section should be used as a guide only as different equipment could need different conditions.



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TYPICAL PROPERTIES			
PROPERTY	TYPICAL VALUE	UNITS	TEST METHOD
Density @ 23°C	1048	kg/m ³	ISO 1183
Hardness (15 second value)	64	Shore D	ISO 868
Heat distortion temperature at 1.80 MPa	41	°C	ISO 75/2
Vicat Softening Point at 10 N	126	°C	ISO 306
Mold Shrinkage	2.5 – 3.5	%	ASTM D955
Melt Flow Index 190°C/21.6 kg	3.6	g/10 min	ISO 1133
Melt Flow Index 190°C/10kg	0.6	g/10 min	ISO 1133
Volume Resistivity	< 10 ²	Ohm.cm	IEC 61340-2-3
Surface Resistivity	< 10 ³	Ohm/sq	IEC 61340-2-3
Flexural Modulus	838	MPa	ISO 178
Tensile Strength at Break on compression molded sample	27	MPa	ISO 527
Tensile Strength at Yield on compression molded sample	21	MPa	ISO 527
Elongation at Break on compression molded sample	918	%	ISO 527
Notched Izod Impact @ 23°C	65	kJ/m ²	ISO 180A

The data in the table above are typical test values intended as guidance only and are not product specifications. Product specifications are available upon request from your Cabot representative.

Product form and logistics

- ◆ Product form: pellets
- ◆ Regional availability: global
- ◆ Packaging options: 25 kg bags

For information on product-specific storage conditions, please refer to the applicable Safety Data Sheet (SDS) available from your Cabot representative or at cabotcorp.com.

The CABELEC name is a registered trademark of Cabot Corporation.

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