CONDUCTIVE COMPOUNDS AND CONCENTRATES

CABELEC® CA3839 CONDUCTIVE COMPOUND

Product highlights
CABELEC CA3839 conductive compound is a static dissipative compound made from carbon black dispersed in a polypropylene copolymer. Its electrical and mechanical properties are not dependent on atmospheric conditions. It has good rigidity and can be easily processed on conventional molding equipment.

Key applications
The static dissipative nature of CABELEC CA3839 conductive compound provides products with a higher resistivity than typical conductive materials and can provide long-lasting static dissipation.

Typical areas of applications are electronics packaging, ammunition works, mines, petroleum plants, and other environments where it is important to mitigate the hazard of electrostatic discharge.

Processing

Pre-drying
CABELEC CA3839 conductive compound absorbs very little moisture from the atmosphere during normal storage and usage conditions, which is a significant benefit for applications where a very low moisture absorption is essential for a good surface appearance. Therefore, pre-drying of the compound before processing is not necessary for most applications. 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 to achieve a good final product quality. Usually 2 - 3 hours in a dryer at 90°C is sufficient time to reduce the moisture content to an acceptable level.

Injection molding
CABELEC CA3839 conductive compound can be processed on most types of injection molding machinery. Low shear conditions are nevertheless required in order to achieve good electrical conductivity. The optimal processing conditions depend on the machinery, output rate and complexity of the injected part under manufacture. As a general guidance, the following injection molding temperatures have been used successfully:

- Barrel/nozzle: 200 °C / 220 °C
- Mold: 30 °C

Mold design
Generous gates are helpful for the molding of CABELEC CA3839 conductive compound as for other highly filled thermoplastics.

The information given in this section is provided as guidance only as different equipment could require different processing conditions to achieve the desired results.
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