

## **Guideline**

### Anti-static and Conductive HDPE

#### **Anti-static material information**

Anti-static, generally blue containers, do not hold a charge for very long. A charge of 5000 volts is fully decayed in less than 2 seconds. This material requires a relative humidity of 15% or greater, so it won't do the job in very dry atmospheres. The advantage of this material is that it does not slough conductive particles and is therefore usable in clean room situations. Trays meet minimum specifications per MIL-B-81705B. The base material, high density polyethylene, has high impact strength. To ensure that the containers are anti-static, we test the surface resistance. It must be less than 10<sup>12</sup> ohms per square inch.

#### **Conductive material information**

Conductive containers are always black because the material contains carbon black. The carbon black allows the containers to conduct, and therefore if grounded, they will not create an ESD moment. The conductivity of the containers is a permanent part of the high density polyethylene material used to manufacture the containers. There is, however, a tendency for minute particles of the carbon black to slough. This trait may make the containers unacceptable in certain clean rooms. To ensure that the containers are conductive and meet the specification MIL-B81705B, we test the surface resistivity to make sure that it is 10<sup>5</sup> or less ohms per square inch.

#### **Note/Disclaimer**

This information is presented from the source manufacturer and is deemed to be reliable. However it is intended as a guideline. It is the sole responsibility of each buyer to make their own independent tests and decisions about whether any of these plastics are suitable for their packaging solution prior to purchasing. [Samples are available for review.](#)

For additional questions on this material, contact  
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