

## PRODUCT REFERENCE: *E-TEC*<sup>®</sup> HD 12491

**DESCRIPTION:** Electrically conductive compound based on a conductive carbon black in an HDPE carrier.

**APPLICATIONS:** *E-TEC*<sup>®</sup> HD 12491 is suggested for blow moulding of containers and other products where the article requires a level of permanent electrical conductivity. Such products find application in areas where the accumulation of static electrical charges on conventional polymers may cause problems, for example in the handling of static sensitive solvents or explosives. This product can also be used in profile and sheet extrusions and can be thermoformed.

**ADDITION RATE:** *E-TEC*<sup>®</sup> HD 12491 is designed for use as a compound at 100% addition rate. In some circumstances it may be possible to dilute this product with other polymers although this will invariably reduce the conductivity of the end article.

**PROCESSING:** Suggested extrusion and moulding temperatures are in line with those for unmodified HDPE polymers, typically 170 to 220 °C. For many applications it is not necessary to pre-dry this product. In some critical applications it may be found necessary to pre-dry the product using a temperature of up to 80 °C for 2 to 4 hours.

### TYPICAL PROPERTIES:

<b>Melt flow rate:</b>	5 g/10 min. (190 °C/21.6 kg) (ISO 1133)	
<b>Surface Resistance:</b>	1x10 <sup>4</sup> ohm	(DIN 53482)
<b>Volume Resistivity</b>	1x10 <sup>3</sup> ohm.cm	(DIN 53482)
<b>Tensile strength at break:</b>	23 MPa	(ISO 527)
<b>Elongation at break:</b>	700 %	(ISO 527)

**Packaging:** *E-TEC*<sup>®</sup> HD 12491 is normally packed in 25kg polyvalve bags. It should be stored in a clean dry area.

For Health and Safety information, please refer to the appropriate COLLOIDS Material Safety Data Sheet.

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