

PRODUCT REFERENCE: *E-TEC*[®] PP 13579

DESCRIPTION: An electrically conductive compound based on a dispersion of a conductive carbon black in a modified polypropylene polymer.

APPLICATIONS: *E-TEC*[®] PP 13579 is suggested for the injection moulding of rigid articles requiring a high degree of permanent electrical conductivity such as tote boxes and other containers. 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 electronic devices or explosives. *E-TEC*[®] PP 13579 gives a slightly higher degree of rigidity than would be found in an unmodified polypropylene.

ADDITION RATE: *E-TEC*[®] PP 13579 is designed for use as a compound at 100% addition rate. In some very limited 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 moulding temperatures are in line with those for unmodified polypropylene polymers, typically 190 to 240 °C. When injection moulding, generously sized gates will minimise any reduction in conductivity arising from processing. For some applications it may be found necessary to pre-dry this product using a temperature of up to 80 °C for 3 to 4 hours.

TYPICAL PROPERTIES:

Heat Distortion Temperature:	115 °C	(ISO 75 method A)
Surface Resistance:	3 x 10 ¹ ohm	(DIN 53482)
Tensile strength:	24 MPa	(ISO 527)
Elongation at break:	5 %	(ISO 527)
Flexural Modulus:	3100 MPa	(ISO 178)
Flexural Strength:	46 MPa	(ISO 178)
Impact Resistance:	2.2 KJ/m ²	(ISO 180)
Melt Flow Rate:	50 g/10 min.	(ISO 1133 – 230 °C/10kg)
Bulk Density:	600 kg.m ⁻³	(ASTM D1895)

Packaging: *E-TEC*[®] PP 13579 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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