



PREMIX OY INFO

175-811/2/3

PRE-ELEC CP 1315

PRE-ELEC CP 1315 is a conductive thermoplastic compound on polyolefine copolymer base. Conductivity is achieved by using special conductive carbon black. In addition to low electrical resistivity PRE-ELEC CP 1315 has excellent mechanical properties making it suitable for applications where standard EVA resin normally is used. Typical applications are flexible extruded products like sheets for floor matting.

Appearance	granular
Colour	black
Moisture content	max. 0.15% when produced
Packaging	1000 kg octabin
Storing	can be stored one year in normal storing conditions

PHYSICAL PROPERTIES	test method	unit	value
Density		g/cm ³	1,01
Melt flow index (230°C/5,0 kg)	ASTM D-1238	g/10 min	5
(230°C/11,6 kg)		g/10 min	25
Tensile strength	ASTM D-638	MPa	13
Yield strength	ASTM D-638	MPa	
Elongation at break	ASTM D-638	%	150
Elongation at yield	ASTM D-638	%	
Modulus of Elasticity	ASTM D-790	MPa	200



Impact strength Charpy 23°C	ASTM D-256	kJ/m ²	no break
	ASTM D-256	kJ/m ²	no break
Impact strength Charpy, notched 23°C 20°C	ASTM D-256	kJ/m ²	15
	ASTM D-256	kJ/m ²	5
Vicat softening point 1,0 kg	ASTM D-1525 Rate A	°C	73
HDT	ASTM D-648-82	0,45 MPa °C	46
Volume resistivity	ASTM D-257	Ω cm	< 10 ⁴
Surface resistivity	ASTM D-257	Ω	< 10 ⁵
Shrinkage	ASTM D-955-73	%	1.4 - 1.8
Hardness Shore A/D	ASTM D-2240		97/45

PROCESSING

PRE-ELEC CP 1315 compound can be extruded or injection moulded without modifications in the machines using normal processing conditions as with EVA. Predrying is recommended if the material has been stored for a longer time (min. 3 h at 60°C).

RECOMMENDED PROCESSING PARAMETERS

Injection moulding	Cylinder-nozzle	180-220°C
	Mould	40-80°C
	Injection pressure	600
	Injection speed	moderate
Extrusion	Material temperature	180-205°C

The heat content of the compound leaving the machine is high due to its relatively poor flowing leading to elevated temperatures and increased pressure, which when released is still raising the material's temperature. As the self ignition temperature of polymer/carbon black compounds is around 350°C care must be taken that e.g. purged material will not catch fire. Overheated material can be cooled e.g. with water.

The information in this data sheet represents typical values obtained by us and should not be regarded as specification.

FARNELL

EVA BENCH & FLOOR MATTING DATA SHEET

- VOLUME CONDUCTIVE
- HUMIDITY INDEPENDENT
- CONDUCTIVITY OF 10^3 OHMS
- EXCELLENT LAY FLAT PROPERTIES
- ATTRACTIVE NON SLIP FINISH

DATA SHEET

SG:	1.16 Mg/m ²	ISO R— 1183
T.S. YIELD	9 Mpa	ISO R— 527
T.S. BREAK	13 Mpa	ISO R— 527
E. BREAK	250%	ISO R— 527
VICAT	73°C	ISO R— 306
VOLUME RESISTIVITY	10^3 ohms per cm.	BS 2050
SURFACE RESISTIVITY	10^3 ohms per sq.	BS 2050

This specification falls well within the specifications set under British Standard BS 2050