

POLIMAXX SC210BKC

IRPC Public Company Limited - High Impact Polystyrene

General Information

Product Description

SC210BKC is a High Impact Polystyrene Conductive Compound with special additive package to obtain a good electrical conductivity. It is designed for the extrusion processing with good impact strength and long lasting conductive properties that suitable for conductive layer in three-layer co-extrusion sheet. Moreover, it provides surface resistivity in a range of 10 - 10 Ohm/square to prevent electrostatic discharge (ESD) phenomena in electronic devices packaging.

Industry:

- Appliance & Electronic Parts
- IC Tray
- Electronic devices packaging

Product Feature:

- High Flowability
- Low temperature process
- Low surface resistivity range 10 - 10 Ohm/square

Regulation Compliance:

- RoHS Directive 2011/65/EU
- REACH Regulation (EC) No. 1907/2006

General

Material Status	• Commercial: Active
Availability	• Asia Pacific • Europe • North America
Additive	• Unspecified Additive
Features	• Good Stiffness • High Flow • High Impact Resistance
Uses	• Appliance Components • Packaging • Electrical/Electronic • Trays Applications
Agency Ratings	• EC 1907/2006 (REACH) • EU 2011/65/EC
RoHS Compliance	• RoHS Compliant
Processing Method	• Extrusion

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity ²	1.11		ASTM D792
Melt Mass-Flow Rate (MFR)			ASTM D1238
200°C/10.0 kg	5.5	g/10 min	
200°C/5.0 kg	1.3	g/10 min	
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus ³ (0.126 in)	270000	psi	ASTM D638
Tensile Strength ³ (Yield, 0.126 in)	3410	psi	ASTM D638
Flexural Modulus ^{4, 5} (0.252 in)	256000	psi	ASTM D790
Flexural Strength ⁴ (0.252 in)	5120	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F, 0.252 in)	1.1	ft-lb/in	ASTM D256
Thermal	Nominal Value	Unit	Test Method
Vicat Softening Temperature ⁶	216	°F	ASTM D1525 ⁷
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	1.0E+4 to 1.0E+5	ohms	ASTM D257

Processing Information



Extrusion	Nominal Value	Unit
Drying Temperature	176 to 194	°F
Drying Time	2.0 to 4.0	hr
Cylinder Zone 1 Temp.	338 to 446	°F
Cylinder Zone 2 Temp.	338 to 446	°F
Cylinder Zone 3 Temp.	338 to 446	°F
Cylinder Zone 4 Temp.	338 to 446	°F
Cylinder Zone 5 Temp.	338 to 446	°F
Die Temperature	356 to 410	°F

Notes

¹ Typical properties: these are not to be construed as specifications.
² 23°C
³ 0.20 in/min
⁴ 0.079 in/min
⁵ E-Modulus
⁶ 3.2mm
⁷ Rate A (50°C/h), Loading 1 (10 N)

