

POLIMAXX SC430BKC

IRPC Public Company Limited - High Impact Polystyrene

General Information

Product Description

SC430BKC is a High Impact Polystyrene Dissipative Polymer 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 single layer conductive sheet. Moreover, it provides low 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 Applications	• Trays	
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	4.0	g/10 min	
200°C/5.0 kg	0.85	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)	3560	psi	ASTM D638
Flexural Modulus ^{4, 5} (0.252 in)	242000	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)	2.2	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)

