

## Electrafil® PS-31/EC

Techmer Polymer Modifiers - General Purpose Polystyrene

### General

Material Status	• Commercial: Active
Availability	• Africa & Middle East • Europe • North America • Asia Pacific • Latin America
Features	• Electrically Conductive
RoHS Compliance	• RoHS Compliant
Forms	• Pellets
Processing Method	• Injection Molding

### Properties <sup>1</sup>

	Nominal Value	Unit	Test Method
<b>Physical</b>			
Density / Specific Gravity	1.07	g/cm <sup>3</sup>	ASTM D792
Melt Mass-Flow Rate (MFR) (200°C/5.0 kg)	7.0	g/10 min	ASTM D1238
Molding Shrinkage - Flow (3.18 mm)	0.50	%	ASTM D955
<b>Mechanical</b>			
Tensile Strength (23°C)	24.1	MPa	ASTM D638
Tensile Elongation (Break, 23°C)	15	%	ASTM D638
Flexural Modulus (23°C)	1720	MPa	ASTM D790
Flexural Strength	29.0	MPa	ASTM D790
<b>Impact</b>			
Notched Izod Impact (23°C, 3.18 mm)	270	J/m	ASTM D256
<b>Thermal</b>			
Deflection Temperature Under Load (1.8 MPa, Unannealed)	71.1	°C	ASTM D648
<b>Electrical</b>			
Surface Resistivity	1.0E+4	ohms	ASTM D257
<b>Additional Information</b>			
Surface Resistivity, ASTM D257: 1E3-1E4 ohms/sq			

### Processing Information

	Nominal Value	Unit
<b>Injection</b>		
Drying Temperature	71	°C
Drying Time	2.0 to 4.0	hr
Suggested Max Moisture	0.020	%
Rear Temperature	221 to 232	°C
Middle Temperature	227 to 243	°C
Front Temperature	221 to 238	°C
Nozzle Temperature	216 to 232	°C
Processing (Melt) Temp	232 to 243	°C
Mold Temperature	49 to 66	°C
Injection Rate	Moderate	
Back Pressure	0.172 to 0.345	MPa
Screw Speed	60 to 100	rpm

