

Electrafil® PS-31/EC

Techmer Polymer Modifiers - *General Purpose Polystyrene*

General Information

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 ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.07		ASTM D792
Melt Mass-Flow Rate (MFR) (200°C/5.0 kg)	7.0	g/10 min	ASTM D1238
Molding Shrinkage - Flow (0.125 in)	5.0E-3	in/in	ASTM D955
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (73°F)	3500	psi	ASTM D638
Tensile Elongation (Break, 73°F)	15	%	ASTM D638
Flexural Modulus (73°F)	250000	psi	ASTM D790
Flexural Strength	4200	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F, 0.125 in)	5.0	ft·lb/in	ASTM D256
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	160	°F	ASTM D648
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	1.0E+4	ohms	ASTM D257
Additional Information	Surface Resistivity, ASTM D257: 1E3-1E4 ohms/sq		

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	160	°F
Drying Time	2.0 to 4.0	hr
Suggested Max Moisture	0.020	%
Rear Temperature	430 to 450	°F
Middle Temperature	440 to 470	°F
Front Temperature	430 to 460	°F
Nozzle Temperature	420 to 450	°F
Processing (Melt) Temp	450 to 470	°F
Mold Temperature	120 to 150	°F
Injection Rate	Moderate	
Back Pressure	25.0 to 50.0	psi
Screw Speed	60 to 100	rpm

Notes

¹ Typical properties: these are not to be construed as specifications.

