

**AuroraTec™ PESU-19457**

Aurora Material Solutions, LLC - Polyethersulfone

**General Information**
**Product Description**

AuroraTec™ PESU-19457 is a High Temperature Clear Polyethersulfone Injection Molding Grade that is Suitable for Continuous Temperatures of up to 400 F (204 C).

**General**

Material Status	• Commercial: Active
Availability	• Asia Pacific • Latin America • Europe • North America
Features	• Steam Sterilizable
Uses	• Bottles • Food Service Applications
RoHS Compliance	• RoHS Compliant
Appearance	• Clear Amber
Processing Method	• Injection Molding

**Properties <sup>1</sup>**

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.37		ASTM D792
Melt Mass-Flow Rate (MFR) (380°C/2.16 kg)	50	g/10 min	ASTM D1238
Water Absorption (Saturation, 73°F)	0.45	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	386000	psi	ASTM D638
Tensile Strength (Yield)	12500	psi	ASTM D638
Tensile Elongation (Break)	> 7.0	%	ASTM D638
Flexural Modulus	381000	psi	ASTM D790
Flexural Strength	17700	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F)	1.0	ft-lb/in	ASTM D256
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	392	°F	ASTM D648
Glass Transition Temperature	428	°F	ISO 11357-2
Electrical	Nominal Value	Unit	Test Method
Volume Resistivity	1.5E+15	ohms-cm	ASTM D257
Dielectric Strength	380	V/mil	ASTM D149
Dielectric Constant	3.60		ASTM D150
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.06 in)	V-0		Internal Method

**Processing Information**

Injection	Nominal Value	Unit
Drying Temperature	265 to 300	°F
Drying Time	4.0 to 6.0	hr
Suggested Max Moisture	0.020	%
Rear Temperature	650 to 735	°F
Middle Temperature	650 to 735	°F
Front Temperature	650 to 735	°F
Nozzle Temperature	650 to 735	°F
Mold Temperature	300 to 325	°F
Injection Rate		Fast
Back Pressure	500 to 1500	psi

