

AuroraGuard™ PEEK-19450

Aurora Material Solutions, LLC - Polyetheretherketone

General Information

Product Description

AuroraGuard™ PEEK-19450 is an Unfilled, High Molecular Weight, Natural Polyetheretherketone (PEEK) Injection Molding Grade.

General

Material Status	• Commercial: Active		
Availability	• Asia Pacific	• Latin America	• North America
Features	• Chemical Resistant	• Good Thermal Stability	• Hydrolysis Resistant
	• Good Dimensional Stability	• High Heat Resistance	
Uses	• Appliance Components	• Electrical Parts	
RoHS Compliance	• RoHS Compliant		
Appearance	• Natural Color		
Forms	• Pellets		
Processing Method	• 3D Printing	• Extrusion	• Injection Molding

Properties ¹

	Nominal Value	Unit	Test Method
Physical			
Density / Specific Gravity	1.31		ASTM D792
Water Absorption (Equilibrium)	0.10	%	ASTM D570
Mechanical			
Tensile Modulus	500000	psi	ASTM D638
Tensile Strength (Break)	14400	psi	ASTM D638
Tensile Elongation (Yield)	5.3	%	ASTM D638
Flexural Modulus	522000	psi	ASTM D790
Flexural Strength	21700	psi	ASTM D790
Impact			
Notched Izod Impact (73°F)	1.6	ft-lb/in	ASTM D256
Thermal			
Deflection Temperature Under Load (264 psi, Unannealed)	315	°F	ASTM D648
Glass Transition Temperature	302	°F	ASTM E1356

Processing Information

	Nominal Value	Unit
Injection		
Drying Temperature	260 to 320	°F
Drying Time	4.0 to 6.0	hr
Suggested Max Moisture	0.020	%
Rear Temperature	680 to 730	°F
Middle Temperature	680 to 730	°F
Front Temperature	680 to 730	°F
Nozzle Temperature	680 to 730	°F
Mold Temperature	340 to 390	°F
Injection Rate		Fast

