

AuroraGuard™ PC-19456

Aurora Material Solutions, LLC - Polycarbonate

General Information

Product Description

AuroraGuard™ PC-19456 is a High Viscosity, Clear Polycarbonate (PC) Injection Molding Grade.

General

Material Status	• Commercial: Active
Availability	• Asia Pacific • Latin America • Europe • North America
Features	• Good Heat Resistance • Good Impact Resistance • Good Mold Release
Uses	• General Purpose
Agency Ratings	• EC 1907/2006 (REACH)
RoHS Compliance	• RoHS Compliant
Appearance	• Clear/Transparent
Forms	• Pellets
Processing Method	• Injection Molding

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.20		ASTM D792
Melt Mass-Flow Rate (MFR) (300°C/1.2 kg)	7.0	g/10 min	ASTM D1238
Molding Shrinkage - Flow (0.125 in)	6.0E-3 to 8.0E-3	in/in	ASTM D955
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	348000	psi	ASTM D638
Tensile Strength (Yield)	9400	psi	ASTM D638
Tensile Elongation (Break)	130	%	ASTM D638
Flexural Modulus	348000	psi	ASTM D790
Flexural Strength	12100	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F)	16	ft·lb/in	ASTM D256
Gardner Impact (73°F)	560	in·lb	ASTM D5420
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	260	°F	ASTM D648
Flammability	Nominal Value	Unit	Test Method
Flame Rating			
0.06 in	HB		Internal Method
0.13 in	V-2		UL 94

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	240	°F
Drying Time	3.0 to 4.0	hr
Suggested Max Moisture	0.020	%
Rear Temperature	500 to 540	°F
Middle Temperature	520 to 560	°F
Front Temperature	540 to 580	°F
Nozzle Temperature	540 to 580	°F
Mold Temperature	160 to 200	°F
Injection Rate	Moderate-Fast	
Back Pressure	50.0 to 200	psi
Screw Speed	40 to 70	rpm

