

AuroraGuard™ PC/ABS-18022

Aurora Material Solutions, LLC - Polycarbonate + ABS

General Information

Product Description

AuroraGuard™ PC/ABS-18022 is a Low Gloss, Natural, Polycarbonate/Acrylonitrile Butadiene Styrene (PC/ABS) Injection Molding Grade.

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Uses	• Automotive Interior Parts	• Electrical Parts	• Electrical/Electronic Applications
RoHS Compliance	• RoHS Compliant		
Appearance	• Natural Color		
Forms	• Pellets		
Processing Method	• Injection Molding		
Resin ID (ISO 1043)	• PC/ABS		

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.13		ASTM D792
Melt Mass-Flow Rate (MFR) (260°C/5.0 kg)	18	g/10 min	ASTM D1238
Molding Shrinkage - Flow	5.0E-3 to 7.0E-3	in/in	ASTM D955
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Yield)	7850	psi	ASTM D638
Tensile Elongation (Break)	75	%	ASTM D638
Flexural Modulus	335000	psi	ASTM D790
Flexural Strength	12400	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact			ASTM D256
-22°F	5.6	ft·lb/in	
73°F	10	ft·lb/in	
Gardner Impact ²	420	in·lb	ASTM D3029
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	225	°F	ASTM D648
Flammability	Nominal Value	Unit	Test Method
Burning Rate (0.125 in, Self-Extinguishing)	0.0	in/min	ISO 3795
Flame Rating (0.06 in)	HB		UL 94
Optical	Nominal Value	Unit	Test Method
Gloss (60°, Untextured)	30		ASTM D523/D2457

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	185 to 225	°F
Drying Time	3.0 to 4.0	hr
Suggested Max Moisture	0.020	%
Rear Temperature	460 to 510	°F
Middle Temperature	480 to 550	°F
Front Temperature	480 to 550	°F
Nozzle Temperature	480 to 520	°F
Mold Temperature	150 to 190	°F



Injection Rate	Moderate-Fast
Back Pressure	50.0 to 100 psi
Screw Speed	40 to 70 rpm

Notes

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

² No Failure Energy

