

AuroraGuard™ 1812R

Aurora Material Solutions, LLC - Polycarbonate

General Information

Product Description

High Flow PC with Mold Release

Formerly known as EnPure 1812R

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Additive	• Mold Release		
Features	• Good Mold Release	• High Flow	
Uses	• Automotive Applications	• Business Equipment	• Thin-walled Parts
Appearance	• Black	• Colors Available	• Natural Color
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)	18	g/10 min	ASTM D1238
Molding Shrinkage - Flow (0.126 in)	6.0E-3	in/in	ASTM D955
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Yield)	8500	psi	ASTM D638
Tensile Elongation (Break)	120	%	ASTM D638
Flexural Modulus	330000	psi	ASTM D790
Flexural Strength	11500	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F)	12	ft·lb/in	ASTM D256
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	270	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed)	260	°F	ASTM D648

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	220 to 250	°F
Drying Time	4.0	hr
Suggested Max Moisture	0.020	%
Suggested Shot Size	40 to 75	%
Rear Temperature	520 to 560	°F
Middle Temperature	540 to 580	°F
Front Temperature	550 to 600	°F
Nozzle Temperature	550 to 590	°F
Processing (Melt) Temp	560 to 600	°F
Mold Temperature	160 to 210	°F
Back Pressure	50.0 to 100	psi
Screw Speed	30 to 70	rpm
Vent Depth	1.5E-3 to 3.0E-3	in
Injection Notes		
Maximum Drying Time 7 hrs		

