

AuroraGuard™ ENV15-78018

Aurora Material Solutions, LLC - Polycarbonate + ABS

General Information

Product Description

AuroraGuard™ ENV15-78018 is a Black Polycarbonate/Acrylonitrile Butadiene Styrene (PC/ABS). Injection Molding Grade.

Formerly branded as ENVIROLOY®.

General

Material Status	• Commercial: Active
Availability	• Asia Pacific • Europe • Latin America • North America
Features	• High Heat Resistance • Low Temperature Resistant
Uses	• Automotive Interior Parts
RoHS Compliance	• RoHS Compliant
Appearance	• Black
Forms	• Pellets
Processing Method	• Injection Molding

Properties ¹

	Nominal Value	Unit	Test Method
Physical			
Density	1.13	g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (260°C/5.0 kg)	18	g/10 min	ISO 1133
Molding Shrinkage - Flow	0.50 to 0.70	%	ISO 294-4
Mechanical			
Tensile Modulus	342000	psi	ISO 527-1
Tensile Stress (Yield)	7830	psi	ISO 527-2
Tensile Strain (Break)	> 50	%	ISO 527-2
Flexural Modulus	341000	psi	ISO 178
Flexural Stress	12100	psi	ISO 178
Impact			
Charpy Notched Impact Strength			ISO 179
-22°F	16	ft·lb/in ²	
73°F	27	ft·lb/in ²	
Notched Izod Impact Strength			ISO 180
-22°F	16	ft·lb/in ²	
73°F	24	ft·lb/in ²	
Thermal			
Deflection Temperature Under Load (66 psi, Unannealed)	255	°F	ISO 75-2/B
Deflection Temperature Under Load (264 psi, Unannealed)	225	°F	ISO 75-2/A
Vicat Softening Temperature	252	°F	ISO 306/B
Flammability			
Burning Rate (0.125 in, Self-Extinguishing)	< 0.0	in/min	ISO 3795
Flame Rating (0.06 in)	HB		Internal Method

Processing Information

	Nominal Value	Unit
Injection		
Drying Temperature	185 to 230	°F
Drying Time	3.0 to 4.0	hr
Suggested Max Moisture	0.020	%
Rear Temperature	437 to 455	°F
Middle Temperature	437 to 455	°F
Front Temperature	455 to 473	°F



Nozzle Temperature	491 to 509 °F
Processing (Melt) Temp	464 to 482 °F
Mold Temperature	158 to 194 °F
Injection Rate	Moderate-Fast
Back Pressure	725 to 2180 psi
Screw Speed	40 to 70 rpm

Notes

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

