AuroraGuard™ ENV15-18018
Aurora Material Solutions, LLC - *Polycarbonate + ABS*

General Information

Product Description

AuroraGuard™ ENV15-18018 is a Natural Polycarbonate/Acrylonitrile Butadiene Styrene (PC/ABS). Injection Molding Grade.

Formerly branded as ENVIROLOY®.

General

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

Properties [1]

Physical	Nominal Value	Unit	Test Method
Density	1.13	g/cm³	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	Nominal Value	Unit	Test Method
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	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength			ISO 179
-22°F	16	ft·lb/in²	
73°F	27	ft·lb/in²	
Notched Izod Impact Strength			ISO 180
-22°F	16	ft·lb/in²	
73°F	24	ft·lb/in²	

Thermal	Nominal Value	Unit	Test Method
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	Nominal Value	Unit	Test Method
Burning Rate (0.125 in, Self-Extinguishing)	< 0.0	in/min	ISO 3795
Flame Rating (0.06 in)	HB		Internal Method

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	185 to 230	°F
Drying Time	3.0 to 4.0	hr
Suggested Max Moisture	0.020	%
Rear Temperature	446 to 464	°F
Middle Temperature	455 to 473	°F
Front Temperature	455 to 473	°F

Nozzle Temperature	509 to 527 °F
Processing (Melt) Temp	500 to 518 °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.