

AuroraGuard™ ENV15-78016

Aurora Material Solutions, LLC - Polycarbonate + ABS

General Information

Product Description

AuroraGuard™ ENV15-78016 is a Hydrolytically Stable, Black Polycarbonate/Acrylonitrile Butadiene Styrene (PC/ABS). Injection Molding Grade. Low Odor and VOC Content for Automotive Interior Component Applications.

Formerly branded as ENVIROLOY®.

General

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

Properties ¹

Physical	Nominal Value	Unit	Test Method
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	0.40 to 0.60	%	ISO 294-4
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	351	psi	ISO 527-1
Tensile Stress (Yield)	7450	psi	ISO 527-2
Tensile Strain (Break)	> 100	%	ISO 527-2
Flexural Modulus	336000	psi	ISO 178
Flexural Stress	12100	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength			ISO 179
-22°F	11	ft·lb/in ²	
73°F	27	ft·lb/in ²	
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	261	°F	ISO 306/B
CLTE - Flow (-22 to 86°F, 0.118 in)	3.8	in/in/°F	ISO 11359-2
CLTE - Transverse (-22 to 86°F, 0.118 in)	4.0	in/in/°F	ISO 11359-2
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
Additional Information	Nominal Value	Unit	Test Method
Fogging ²	100	%	SAE J1756

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	437 to 455 °F
Middle Temperature	455 to 473 °F
Front Temperature	464 to 482 °F
Nozzle Temperature	491 to 509 °F
Processing (Melt) Temp	464 to 500 °F
Mold Temperature	140 to 160 °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.

² Clear and Dry.

