

AuroraGuard™ ENV15-78014

Aurora Material Solutions, LLC - Polycarbonate + ABS

General Information
Product Description

AuroraGuard™ ENV15-78014 is a Black Polycarbonate/Acrylonitrile Butadiene Styrene (PC/ABS) Injection Molding Grade.

Formerly Branded as ENVIROLOY®.

General

Material Status	• Commercial: Active
Availability	• Latin America • North America
Features	• Good Processability • High Heat Resistance • High Flow • Hydrolytically Stable
Uses	• Automotive Applications
Agency Ratings	• EC 1907/2006 (REACH) - SVHC Free
RoHS Compliance	• RoHS Compliant
Appearance	• Black
Forms	• Pellets
Processing Method	• Injection Molding

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.15		ASTM D792
Melt Mass-Flow Rate (MFR) (250°C/10.0 kg)	37	g/10 min	ASTM D1238
Molding Shrinkage - Flow	4.0E-3 to 6.0E-3	in/in	ASTM D955
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Yield)	9200	psi	ASTM D638
Tensile Elongation (Break)	100	%	ASTM D638
Flexural Modulus	341000	psi	ASTM D790
Flexural Strength	12800	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact			ASTM D256
-22°F	2.4	ft·lb/in	
73°F	10	ft·lb/in	
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed, 0.250 in)	264	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed, 0.250 in)	239	°F	ASTM D648
Vicat Softening Temperature	266	°F	ISO 306/B50
Flammability	Nominal Value	Unit	Test Method
Burning Rate (3.20 in, Self-Extinguishing)	< 0.25	in/min	ISO 3795
Flame Rating (0.07 in)	HB		Internal Method

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	212 to 230	°F
Drying Time	3.0 to 4.0	hr
Suggested Max Moisture	0.020	%
Rear Temperature	480 to 540	°F
Middle Temperature	480 to 540	°F
Front Temperature	500 to 550	°F
Nozzle Temperature	500 to 550	°F
Mold Temperature	140 to 180	°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.

