

AuroraTec™ ENV39-NC410

Aurora Material Solutions, LLC - Polycarbonate + PBT

General Information
Product Description

Injection Molding Grade, UV Stabilized, w/Mold Release, Low Temperature Impact and Chemical Resistance, Automotive Exterior and OVAD Applications. RoHS and REACH Compliant

NC410 = To Be Assigned 5 Digit Number Indicating Natural, Black, or Custom Color.

Formerly known as ENVIRON® ENV39-NC410.

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East	• Europe	• North America
	• Asia Pacific	• Latin America	
Additive	• Mold Release		
	• UV Stabilizer		
Features	• Chemical Resistant	• Low Temperature Impact Resistance	
	• Good Mold Release	• UV Resistant	
Uses	• Automotive Exterior Parts	• Automotive Under the Hood	
RoHS Compliance	• RoHS Compliant		
Appearance	• Black	• Colors Available	• Natural Color
Forms	• Pellets		
Processing Method	• Injection Molding		

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.21		ASTM D792
Melt Mass-Flow Rate (MFR) (250°C/5.0 kg)	18	g/10 min	ASTM D1238
Molding Shrinkage - Flow	8.0E-3 to 0.011	in/in	ASTM D955
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Yield)	7600	psi	ASTM D638
Tensile Elongation (Break)	120	%	ASTM D638
Flexural Modulus	290000	psi	ASTM D790
Flexural Strength	12000	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact			ASTM D256
-40°F	5.0	ft·lb/in	
73°F	12	ft·lb/in	
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	185	°F	ASTM D648
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.12 in)	HB		Internal Method

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	230	°F
Drying Time	4.0 to 6.0	hr
Rear Temperature	470 to 510	°F
Middle Temperature	480 to 520	°F
Front Temperature	490 to 530	°F
Nozzle Temperature	490 to 530	°F
Mold Temperature	150 to 190	°F
Injection Rate	Moderate-Fast	
Back Pressure	50.0 to 100	psi
Screw Speed	50 to 80	rpm

