

AuroraTec™ 43512U

Aurora Material Solutions, LLC - Polycarbonate + Polyester

General Information

Product Description

Impact Modified, PC/Polyester Blend, with UV Stability

Formerly known as EnCounter 43512U

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Additive	• Impact Modifier	• UV Stabilizer	
Features	• Impact Modified	• UV Stabilized	
Uses	• Automotive Applications	• Lawn & Garden Equipment	
Appearance	• Black	• Colors Available	• Natural Color
Processing Method	• Injection Molding	• Profile Extrusion	

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.18		ASTM D792
Melt Mass-Flow Rate (MFR) (260°C/5.0 kg)	35	g/10 min	ASTM D1238
Molding Shrinkage - Flow (0.126 in)	8.0E-3 to 0.012	in/in	ASTM D955
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Yield)	8000	psi	ASTM D638
Tensile Elongation (Break)	150	%	ASTM D638
Flexural Modulus	300000	psi	ASTM D790
Flexural Strength	10000	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact			ASTM D256
-22°F	6.0	ft-lb/in	
73°F	12	ft-lb/in	
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness	105		ASTM D785
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	230	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed)	200	°F	ASTM D648

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	220 to 250	°F
Drying Time	3.0 to 6.0	hr
Suggested Max Moisture	0.020	%
Rear Temperature	480 to 540	°F
Middle Temperature	490 to 550	°F
Front Temperature	500 to 570	°F
Nozzle Temperature	525 to 575	°F
Processing (Melt) Temp	530 to 585	°F
Mold Temperature	150 to 200	°F
Back Pressure	50.0 to 100	psi
Screw Speed	40 to 75	rpm
Vent Depth	1.5E-3 to 3.0E-3	in
Injection Notes		
Maximum Drying Time 7.0 hrs		

