

AuroraGuard™ F0803U

Aurora Material Solutions, LLC - Acrylonitrile Butadiene Styrene

General Information

Product Description

Flame Retardant Molding Grade ABS, RoHS Compliant, UV Resistant
Formerly known as EnCore F0803U

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Additive	• Flame Retardant		
Features	• Flame Retardant	• UV Resistant	
Uses	• Business Equipment	• Electrical/Electronic Applications	
RoHS Compliance	• RoHS Compliant		
Appearance	• Black	• Colors Available	• Natural Color
Processing Method	• Injection Molding	• Profile Extrusion	

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.22		ASTM D792
Melt Mass-Flow Rate (MFR) (230°C/3.8 kg)	8.0	g/10 min	ASTM D1238
Molding Shrinkage - Flow (0.126 in)	5.0E-3 to 8.0E-3	in/in	ASTM D955
Molding Shrinkage - Across Flow (0.126 in)	4.0E-3 to 7.0E-3	in/in	ASTM D955
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	320000	psi	ASTM D638
Tensile Strength (Yield)	5500	psi	ASTM D638
Tensile Elongation (Break)	4.4	%	ASTM D638
Flexural Modulus	330000	psi	ASTM D790
Flexural Strength	9500	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F)	3.0	ft-lb/in	ASTM D256
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	170	°F	ASTM D648
Flammability	Nominal Value	Unit	Test Method
Flame Rating			UL 94
0.06 in	V-0		
0.13 in	5VA		

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	170 to 190	°F
Drying Time	2.0 to 4.0	hr
Suggested Max Moisture	0.10	%
Rear Temperature	330 to 360	°F
Middle Temperature	350 to 400	°F
Front Temperature	375 to 450	°F
Nozzle Temperature	375 to 450	°F
Processing (Melt) Temp	375 to 450	°F
Mold Temperature	120 to 170	°F
Back Pressure	25.0 to 100	psi



Screw Speed	25 to 75 rpm
Injection Notes	
Maximum Drying Time 7 hr	
Notes	
¹ Typical properties: these are not to be construed as specifications.	

