

AuroraGuard™ F0502

Aurora Material Solutions, LLC - Acrylonitrile Butadiene Styrene

General Information
Product Description

Flame Retardant Molding Grade ABS,
Formerly known as EnCore F0502

General

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

Properties ¹

	Nominal Value	Unit	Test Method
Physical			
Density / Specific Gravity	1.22		ASTM D792
Melt Mass-Flow Rate (MFR) (230°C/3.8 kg)	5.0	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			
Tensile Modulus	320000	psi	ASTM D638
Tensile Strength (Yield)	5510	psi	ASTM D638
Tensile Elongation (Break)	4.4	%	ASTM D638
Flexural Modulus	330000	psi	ASTM D790
Flexural Strength	9570	psi	ASTM D790
Impact			
Notched Izod Impact (73°F)	2.0	ft-lb/in	ASTM D256
Thermal			
Deflection Temperature Under Load (264 psi, Unannealed)	171	°F	ASTM D648
Flammability			
Flame Rating (0.13 in)	V-0		UL 94

Processing Information

	Nominal Value	Unit
Injection		
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: 7.0 hrs

