

AuroraGuard™ ABS0503Aurora Material Solutions, LLC - *Acrylonitrile Butadiene Styrene***General Information****Product Description**

General Purpose ABS with up to 70% PIR Recycle

Formerly known as GEP ABS0503

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Recycled Content	• Post-Industrial (PIR)/Pre-Consumer, 70%		
Features	• General Purpose	• Renewable Resource Content	
Uses	• General Purpose		
Appearance	• Black • Colors Available	• Natural Color • White	
Processing Method	• Injection Molding	• Profile Extrusion	• Sheet Extrusion

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.05		ASTM D792
Melt Mass-Flow Rate (MFR) (260°C/5.0 kg)	5.0	g/10 min	ASTM D1238
Molding Shrinkage - Flow (0.126 in)	6.0E-3	in/in	ASTM D955
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Yield)	5660	psi	ASTM D638
Tensile Elongation (Break)	4.4	%	ASTM D638
Flexural Modulus	325000	psi	ASTM D790
Flexural Strength	10000	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F)	3.0	ft·lb/in	ASTM D256
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness	108		ASTM D785
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	180	°F	ASTM D648
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.06 in)	HB		UL 94

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	180 to 200	°F
Drying Time	2.0 to 4.0	hr
Suggested Max Moisture	0.10	%
Rear Temperature	370 to 450	°F
Middle Temperature	400 to 475	°F
Front Temperature	425 to 500	°F
Nozzle Temperature	425 to 525	°F
Processing (Melt) Temp	425 to 525	°F
Mold Temperature	90 to 160	°F
Back Pressure	25.0 to 100	psi
Screw Speed	25 to 75	rpm

Injection Notes