

ColorFast® FRPS100

Americhem - High Impact Polystyrene

General Information

Product Description

V1-rated high impact styrene

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Additive	• Flame Retardant		
Features	• Excellent Colorability	• Flame Retardant	
Uses	• Closures • Consumer Applications	• Household Goods • Industrial Applications	• Industrial Parts
Forms	• Pellets		
Processing Method	• Injection Molding		

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.08		ASTM D792
Melt Mass-Flow Rate (MFR) (200°C/5.0 kg)	8.0	g/10 min	ASTM D1238
Molding Shrinkage - Flow (0.125 in)	3.0E-3 to 6.0E-3	in/in	ASTM D955
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength ² (Yield)	2800	psi	ASTM D638
Tensile Strength ² (Break)	3000	psi	ASTM D638
Tensile Elongation ² (Break)	40	%	ASTM D638
Flexural Modulus ²	270000	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F)	2.0	ft-lb/in	ASTM D256
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (L-Scale)	55		ASTM D785
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed, 0.250 in)	180	°F	ASTM D648
Flammability	Nominal Value	Unit	Test Method
Flame Rating	V-1		UL 94

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	160	°F
Drying Time	2.0 to 4.0	hr
Drying Time, Maximum	8.0	hr
Suggested Shot Size	40 to 60	%
Rear Temperature	340 to 390	°F
Middle Temperature	380 to 440	°F
Front Temperature	425 to 490	°F
Nozzle Temperature	400 to 450	°F
Processing (Melt) Temp	400 to 460	°F
Mold Temperature	50 to 160	°F
Back Pressure	50.0 to 100	psi
Screw Speed	40 to 70	rpm
Vent Depth	1.0E-3 to 3.0E-3	in

