

ColorFast® FRPC100UV

Americhem - Polycarbonate

General Information
Product Description

UV, Transparent, Flame-retarded , high impact injection molding polycarbonate

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Additive	• Flame Retardant	• UV Stabilizer	
Features	• Excellent Colorability	• Flame Retardant	• UV Stabilized
Uses	• Automotive Applications • Closures • Consumer Applications • Engineering Parts	• Household Goods • Housings • Industrial Applications • Industrial Parts	• Office Automation Equipment • Outdoor Applications
UL File Number	• E178307		
Forms	• Pellets		
Processing Method	• Injection Molding		

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.21		ASTM D792
Melt Mass-Flow Rate (MFR) (300°C/1.2 kg)	10	g/10 min	ASTM D1238
Molding Shrinkage - Flow (0.125 in)	5.0E-3 to 7.0E-3	in/in	ASTM D955
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength ² (Yield)	9000	psi	ASTM D638
Tensile Strength ² (Break)	8100	psi	ASTM D638
Tensile Elongation ² (Yield)	7.0	%	ASTM D638
Tensile Elongation ² (Break)	90	%	ASTM D638
Flexural Modulus ²	325000	psi	ASTM D790
Flexural Strength ²	13200	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F)	15	ft·lb/in	ASTM D256
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (M-Scale)	70		ASTM D785
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed, 0.250 in)	270	°F	ASTM D648
Flammability	Nominal Value	Unit	Test Method
Flame Rating			UL 94
0.030 in	V-2		
0.12 in	V-0		

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	250	°F
Drying Time	3.0 to 4.0	hr
Drying Time, Maximum	48	hr
Suggested Shot Size	40 to 60	%
Rear Temperature	530 to 580	°F
Middle Temperature	560 to 610	°F
Front Temperature	580 to 620	°F



Nozzle Temperature	560 to 620 °F
Processing (Melt) Temp	580 to 620 °F
Mold Temperature	160 to 200 °F
Back Pressure	50.0 to 100 psi
Screw Speed	40 to 70 rpm
Vent Depth	1.0E-3 to 3.0E-3 in

Notes

¹ Typical properties: these are not to be construed as specifications.

² 2.0 in/min

