

ColorFast® FRPC60UV

Americhem - Polycarbonate

General Information
Product Description

FRPC60UV is a medium viscosity injection molding grade of transparent polycarbonate with high impact and UV resistance. It consists of a non-halogenated FR system and passes the FAA flammability requirements for FAR25.853a vertical Bunsen burner test.

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	• Automotive Applications • Closures • Consumer Applications • Engineering Parts • Household Goods • Housings • Industrial Applications • Industrial Parts • Office Automation Equipment
Forms	• Pellets
Processing Method	• Injection Molding

Properties ¹

	Nominal Value	Unit	Test Method
Physical			
Density / Specific Gravity	1.21		ASTM D792
Melt Mass-Flow Rate (MFR) (300°C/1.2 kg)	6.0 to 10	g/10 min	ASTM D1238
Molding Shrinkage - Flow (0.125 in)	5.0E-3 to 7.0E-3	in/in	ASTM D955
Mechanical			
Tensile Strength ² (Yield)	9000	psi	ASTM D638
Tensile Strength ² (Break)	10000	psi	ASTM D638
Tensile Elongation ² (Yield)	7.0	%	ASTM D638
Tensile Elongation ² (Break)	140	%	ASTM D638
Flexural Modulus ²	340000	psi	ASTM D790
Flexural Strength ²	14200	psi	ASTM D790
Impact			
Notched Izod Impact (73°F)	16	ft-lb/in	ASTM D256
Hardness			
Rockwell Hardness (M-Scale)	70		ASTM D785
Thermal			
Deflection Temperature Under Load (264 psi, Unannealed, 0.250 in)	270	°F	ASTM D648
Flammability			
FAA Flammability (60.0 mil)	< 12.0	sec	FAR 25.853(a)

Processing Information

	Nominal Value	Unit
Injection		
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

