

**ColorFast® FRPC310**

Americhem - Polycarbonate

## General Information

**Product Description**

V0-rated 10% glass-filled polycarbonate, excellent impact strength

**General**

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

 Properties <sup>1</sup>

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.27		ASTM D792
Melt Mass-Flow Rate (MFR) (300°C/1.2 kg)	9.0	g/10 min	ASTM D1238
Molding Shrinkage - Flow (0.125 in)	2.0E-3 to 4.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.12	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength <sup>2</sup> (Yield)	9600	psi	ASTM D638
Tensile Strength <sup>2</sup> (Break)	8000	psi	ASTM D638
Tensile Elongation <sup>2</sup> (Yield)	8.0	%	ASTM D638
Tensile Elongation <sup>2</sup> (Break)	15	%	ASTM D638
Flexural Modulus <sup>2</sup>	500000	psi	ASTM D790
Flexural Strength <sup>2</sup>	15000	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 (M-Scale)	85		ASTM D785
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed, 0.250 in)	288	°F	ASTM D648
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.06 in)	V-0		UL 94

## 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	550 to 590	°F
Middle Temperature	570 to 610	°F
Front Temperature	590 to 630	°F
Nozzle Temperature	580 to 620	°F



Processing (Melt) Temp	590 to 630 °F
Mold Temperature	180 to 240 °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

<sup>1</sup> Typical properties: these are not to be construed as specifications.

<sup>2</sup> 2.0 in/min

