

**ColorFast® ACR100IM**
*Americhem - Polymethyl Methacrylate Acrylic*
**General Information**
**Product Description**

High impact version, extrusion or injection molding PMMA

**General**

Material Status	• Commercial: Active
Availability	• Africa & Middle East • Asia Pacific • Europe • Latin America • North America
Additive	• Impact Modifier
Features	• Excellent Colorability • High Impact Resistance • Impact Modified • Low Temperature Toughness
Uses	• Consumer Applications • Household Goods • Industrial Applications • Industrial Parts
Forms	• Pellets
Processing Method	• Injection Molding

**Properties <sup>1</sup>**

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.15		ASTM D792
Melt Mass-Flow Rate (MFR) (230°C/3.8 kg)	1.0	g/10 min	ASTM D1238
Molding Shrinkage - Flow (0.125 in)	2.0E-3 to 6.0E-3	in/in	ASTM D955
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength <sup>2</sup> (Yield)	5500	psi	ASTM D638
Tensile Elongation <sup>2</sup> (Yield)	5.0	%	ASTM D638
Tensile Elongation <sup>2</sup> (Break)	35	%	ASTM D638
Flexural Modulus <sup>2</sup>	270000	psi	ASTM D790
Flexural Strength <sup>2</sup>	10000	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F)	1.1	ft-lb/in	ASTM D256
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (M-Scale)	45		ASTM D785
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed, 0.250 in)	175	°F	ASTM D648

**Processing Information**

Injection	Nominal Value	Unit
Drying Temperature	180	°F
Drying Time	3.0 to 4.0	hr
Drying Time, Maximum	48	hr
Suggested Shot Size	40 to 60	%
Rear Temperature	410 to 450	°F
Middle Temperature	420 to 460	°F
Front Temperature	430 to 470	°F
Nozzle Temperature	420 to 460	°F
Processing (Melt) Temp	430 to 470	°F
Mold Temperature	150 to 190	°F
Back Pressure	100 to 200	psi
Screw Speed	40 to 70	rpm
Vent Depth	1.0E-3 to 3.0E-3	in

