

ColorFast® GPA100

Americhem - Acrylonitrile Butadiene Styrene

General Information

Product Description

GPA100 is a medium flow injection molding grade of ABS (acrylonitrile butadiene styrene) with good impact resistance and high gloss. It is intended for a wide range of applications.

General

Material Status	• Commercial: Active
Availability	• Africa & Middle East • Europe • North America • Asia Pacific • Latin America
Features	• Excellent Colorability
Uses	• Consumer Applications • Industrial Applications • Household Goods • Industrial Parts
Agency Ratings	• UL 94 HB
UL File Number	• E178307
Forms	• Pellets
Processing Method	• Injection Molding

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.05		ASTM D792
Melt Mass-Flow Rate (MFR) (230°C/3.8 kg)	6.0	g/10 min	ASTM D1238
Molding Shrinkage - Flow (0.125 in)	5.0E-3 to 8.0E-3	in/in	ASTM D955
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength ² (Yield)	6500	psi	ASTM D638
Tensile Strength ² (Break)	4600	psi	ASTM D638
Tensile Elongation ² (Yield)	3.0	%	ASTM D638
Tensile Elongation ² (Break)	26	%	ASTM D638
Flexural Modulus ²	330000	psi	ASTM D790
Flexural Strength ²	10000	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F)	6.0	ft·lb/in	ASTM D256
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale)	110		ASTM D785
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed, 0.125 in)	180	°F	ASTM D648
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.06 in)	HB		UL 94

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	180	°F
Drying Time	2.0 to 4.0	hr
Rear Temperature	420	°F
Front Temperature	430	°F
Nozzle Temperature	440	°F
Processing (Melt) Temp	430	°F
Mold Temperature	150 to 180	°F
Back Pressure	50.0 to 100	psi
Screw Speed	40 to 70	rpm



Notes

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

² 2.0 in/min

