

POLIMAXX GA850IRPC Public Company Limited - *Acrylonitrile Butadiene Styrene***General Information****Product Description**

GA850 is a general purpose ABS grade with glossy finish and impact resistance. It is designed for injection molding processing such as appliance & electronic parts, household goods and toys.

Industry:

- Appliance & Electronic Parts
- Housewares
- Sanitary Ware
- Toys

Product Feature:

- High Impact Strength
- High Stiffness
- Glossy Finish Parts

Regulation Compliance:

- FDA US 21 CFR 181.32
- Commission Regulation (EU) 10/2011
- RoHS Directive 2011/65/EU
- REACH Regulation (EC) No. 1907/2006
- UL Yellow Card: E132283
- EN 71-3:Safety of Toys

General

Material Status	• Commercial: Active		
Availability	• Asia Pacific	• Europe	• North America
Features	• Food Contact Acceptable	• General Purpose	• High Impact Resistance
Uses	• Appliance Components • Electrical/Electronic Applications	• General Purpose • Household Goods	• Toys
Agency Ratings	• FDA 21 CFR 181.32	• USP Class VI	
RoHS Compliance	• RoHS Compliant		
Processing Method	• Injection Molding		

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity ²	1.05		ASTM D792
Melt Mass-Flow Rate (MFR) (220°C/10.0 kg)	20	g/10 min	ASTM D1238
Molding Shrinkage	0.40 to 0.60	%	Internal Method
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength ³ (Yield, 0.126 in)	7110	psi	ASTM D638
Tensile Elongation ³ (Break, 0.126 in)	20	%	ASTM D638
Flexural Modulus - 1% Secant ⁴ (0.252 in)	356000	psi	ASTM D790
Flexural Strength ⁴ (Yield, 0.252 in)	9960	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F, 0.252 in)	4.8	ft-lb/in	ASTM D256
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale, 0.252 in)	112		ASTM D785
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed, 0.252 in)	187	°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		176 to 185	°F
Drying Time		2.0 to 4.0	hr
Rear Temperature		374 to 464	°F
Middle Temperature		374 to 464	°F
Front Temperature		374 to 464	°F
Mold Temperature		122 to 176	°F
Injection Rate		Slow-Moderate	
Notes			
1 Typical properties: these are not to be construed as specifications.			
2 23°C			
3 0.20 in/min			
4 0.098 in/min			

