

Technical Data

Product Description

FCFC ABS resin AG12A1 meets the requirements of UL, SGS and the certificates of environmental protection.

General

Material Status	• Commercial: Active
Literature <sup>1</sup>	• <a href="#">Processing (English)</a> • <a href="#">Technical Datasheet (English)</a>
UL Yellow Card <sup>2</sup>	• <a href="#">E162823-224714</a>
Search for UL Yellow Card	• <a href="#">Formosa Plastics Corporation</a> • <a href="#">TAIRILAC</a>
Availability	• Asia Pacific • Europe • North America
Agency Ratings	• EC 1907/2006 (REACH)
RoHS Compliance	• RoHS Compliant
UL File Number	• E162823
Forms	• Pellets
Processing Method	• Injection Molding

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Specific Gravity			
-- <sup>4</sup>	1.04	1.04 g/cm <sup>3</sup>	ASTM D792
73°F (23°C)	1.04 g/cm <sup>3</sup>	1.04 g/cm <sup>3</sup>	ISO 1183
Melt Mass-Flow Rate (MFR)			ASTM D1238 ISO 1133
200°C/5.0 kg	2.1 g/10 min	2.1 g/10 min	
220°C/10.0 kg	21 g/10 min	21 g/10 min	
Molding Shrinkage - Flow	4.0E-3 to 7.0E-3 in/in	0.40 to 0.70 %	Internal Method
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Strength (73°F (23°C))	7250 psi	50.0 MPa	ASTM D638 ISO 527-2
Flexural Modulus			
73°F (23°C)	356000 psi	2450 MPa	ASTM D790
73°F (23°C)	355000 psi	2450 MPa	ISO 178
Flexural Strength (73°F (23°C))	10700 psi	74.0 MPa	ASTM D790 ISO 178
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Unnotched Izod Impact			ASTM D256 ISO 180
73°F (23°C), 0.250 in (6.35 mm)	5.5 ft·lb/in	290 J/m	
Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Rockwell Hardness (R-Scale, 73°F (23°C))	105	105	ASTM D785 ISO 2039-2
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load			ASTM D648 ISO 75-2/A
264 psi (1.8 MPa), Unannealed, 0.500 in (12.7 mm)	183 °F	84.0 °C	
264 psi (1.8 MPa), Annealed <sup>5</sup>	201 °F	94.0 °C	
Vicat Softening Temperature	217 °F	103 °C	ISO 306/A ASTM D1525 <sup>6</sup>
Flammability	Nominal Value (English)	Nominal Value (SI)	Test Method
Flame Rating (0.06 in (1.5 mm), All Colors)	HB	HB	UL 94
Injection	Nominal Value (English)	Nominal Value (SI)	
Drying Temperature	158 to 176 °F	70 to 80 °C	
Drying Time	2.0 to 3.0 hr	2.0 to 3.0 hr	



Injection	Nominal Value (English)	Nominal Value (SI)
Mold Temperature	104 to 176 °F	40 to 80 °C
Injection Pressure	9960 to 15600 psi	68.6 to 108 MPa

**Injection Notes**

Screw Temp: 190-230°C

**Notes**

<sup>1</sup> These links provide you with access to supplier literature. We work hard to keep them up to date; however you may find the most current literature from the supplier.

<sup>2</sup> A UL Yellow Card contains UL-verified flammability and electrical characteristics. UL Prospector continually works to link Yellow Cards to individual plastic materials in Prospector, however this list may not include all of the appropriate links. It is important that you verify the association between these Yellow Cards and the plastic material found in Prospector. For a complete listing of Yellow Cards, visit the UL Yellow Card Search.

<sup>3</sup> Typical properties: these are not to be construed as specifications.

<sup>4</sup> 23°C

<sup>5</sup> 80°Cx8Hr

<sup>6</sup> Loading 1 (10 N)



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## Where to Buy

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### Supplier

**Formosa Plastics Corporation**  
Taipei, Taiwan  
**Telephone:** +886-2-2712-2211  
**Web:** <http://www.fpc.com.tw/>

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### Distributor

#### **GAZECHIM PLASTIQUES**

*GAZECHIM PLASTIQUES is a Pan European distribution company. Contact GAZECHIM PLASTIQUES for availability of individual products by country.*

**Telephone:** +33-4-67-49-55-37  
**Web:** <http://www.gazechim.com/>  
**Availability:** Italy

#### **Osterman & Company**

**Telephone:** 800-914-4437  
**Web:** <http://www.osterman-co.com/>  
**Availability:** North America

#### **PolySource**

**Telephone:** 866-558-5300  
**Web:** <http://www.polysource.net/>  
**Availability:** North America

