

# FORMOCON® FM090

Acetal (POM) Copolymer

Formosa Plastics Corporation



IDES | Prospector

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## Technical Data

### Product Description

Characteristics: Standard flow, minimal mould

Application: Buttons and press in fasteners, Plumbing and hardware, Gears, Electronic parts, Automotive parts, Household, Bearing, Other injection parts.

Also known as FORMOSACON

### General

Material Status	• Commercial: Active
Literature <sup>1</sup>	• <a href="#">Technical Datasheet - Data Table (English)</a>
UL Yellow Card <sup>2</sup>	• <a href="#">E173318-226133</a>
Search for UL Yellow Card	• <a href="#">Formosa Plastics Corporation</a>
Availability	• Asia Pacific • Europe • North America
Features	• Good Flow
Uses	• Automotive Applications • Buttons • Bearings • Electrical/Electronic Applications • Household Goods
Forms	• Pellets

Physical	Nominal Value Unit	Test Method
Specific Gravity	1.41 g/cm <sup>3</sup>	ASTM D792
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	9.0 g/10 min	ASTM D1238
Molding Shrinkage - Flow (3.00 mm)	1.8 to 2.2 %	ASTM D955
Water Absorption (Equilibrium, 23°C, 69%RH)	0.22 %	ASTM D570

Mechanical	Nominal Value Unit	Test Method
Tensile Strength (Yield)	60.8 MPa	ASTM D638
Tensile Elongation (Break)	60 %	ASTM D638
Flexural Modulus	2550 MPa	ASTM D790
Flexural Strength	93.2 MPa	ASTM D790
Compressive Strength		ASTM D695
1% Strain	31.4 MPa	
10% Strain	108 MPa	

Impact	Nominal Value Unit	Test Method
Notched Izod Impact (23°C)	64 J/m	ASTM D256

Hardness	Nominal Value Unit	Test Method
Rockwell Hardness		ASTM D785
M-Scale	80	
R-Scale	115	

Thermal	Nominal Value Unit	Test Method
Deflection Temperature Under Load		ASTM D648
0.45 MPa, Unannealed	158 °C	
1.8 MPa, Unannealed	110 °C	
Vicat Softening Temperature	162 °C	ASTM D1525
Melting Temperature	165 °C	DSC
CLTE - Flow	0.000085 cm/cm/°C	ASTM D696

Electrical	Nominal Value Unit	Test Method
Surface Resistivity <sup>4</sup>	1.0E+16 ohm	ASTM D257
Volume Resistivity <sup>4</sup> (23°C)	1.0E+14 ohm·cm	ASTM D257
Dielectric Strength (2.00 mm)	24 kV/mm	ASTM D149

Electrical	Nominal Value Unit	Test Method
Dielectric Constant		IEC 60250
50 Hz	3.80	
1 kHz	3.80	
1 MHz	3.80	

Flammability	Nominal Value Unit	Test Method
Flame Rating	HB	UL 94

### 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 IDES 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> 50%RH

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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/>

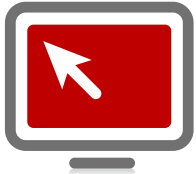
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### Distributor

**Leonardi**  
**Telephone:** +39-71-7300058  
**Web:** <http://www.leonardi.it/>  
**Availability:** Italy



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### Prospector Plastics Database - [www.ides.com/prospector](http://www.ides.com/prospector)

Prospector is a searchable online database that includes 85,000 data sheets from 875 manufacturers and 44,000 UL yellow cards. Each data sheet includes property, processing and supplier contact information. Prospector is relied on by nearly 400,000 design engineers and plastics processors. Using Prospector, they save time with plastic material selection by quickly and easily referencing technical information critical to the success of their products.

*"Prospector is absolutely the best and most well-known search engine for plastic raw materials in the world. We use Prospector every day – it's a real time saver!"*

– Birgit Elvardt Bader, Production Manager, Micotron

#### Power Searches

**Property Search** – select plastics by 500 key properties and design parameters.

**Alternative Resins Search** – find replacement plastics within minutes.

**Automotive Plastics Search** – easily locate automotive approved plastics.

**Curve Data** – view, overlay and export curve data.



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– Kevin Chase, Owner & President, Chase Plastics



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