

FORMOCON® FM090

Acetal (POM) Copolymer

Formosa Plastics Corporation



IDES | Prospector

ides.com/prospector

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 ¹ | • Technical Datasheet - Data Table (English) |
| UL Yellow Card ² | • E173318-226133 |
| Search for UL Yellow Card | • Formosa Plastics Corporation |
| 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 ³ | 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 ⁴ | 1.0E+16 ohm | ASTM D257 |
| Volume Resistivity ⁴ (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

¹ 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.

² 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.

³ Typical properties: these are not to be construed as specifications.

⁴ 50%RH

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Where to Buy

Supplier

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

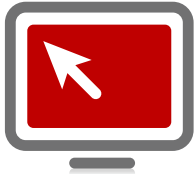
Distributor

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

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Prospector Plastics Database - 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.



Material Data Management – www.ides.com/datasheets

With our data management services, plastic suppliers and distributors can have custom search interfaces available on their website for their customers, website visitors, sales and customer service teams. These provide intuitive ways to find and view technical data sheets for their products.

"With UL IDES data services, our website now displays the most current information on the products we distribute and links to our backend RFQ and sales order system, adding both value and service for our customers."

– Kevin Chase, Owner & President, Chase Plastics



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