

FORMOSACON® FM090

Acetal (POM) Copolymer
Formosa Chemicals & Fibre Corporation



Prospector

Product Description

Characteristics: Standard flow, minimal mould

Application: Buttons, electronic parts, automotive parts, household, bearing.

Also known as FORMOCON

General

Material Status	• Commercial: Active
Availability	• Asia Pacific • Europe
Features	• Good Flow
Uses	• Automotive Applications • Bearings • Buttons • 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		ASTM D955
Flow: 3.00 mm	1.8 %	
Across Flow: 3.00 mm	2.2 %	
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		ASTM D256
23°C	64 J/m	
--	6.4 kJ/m ²	

Hardness	Nominal Value Unit	Test Method
Rockwell Hardness (M-Scale)	80	ASTM D785

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 ²	1.0E+16 ohms	ASTM D257
Volume Resistivity ² (23°C)	1.0E+14 ohm·cm	ASTM D257

Flammability	Nominal Value Unit	Test Method
Flame Rating - UL	HB	UL 94

Notes

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

² 50%RH