

# FORMOSACON® FM.9.

## Acetal (POM) Copolymer

### Formosa Chemicals & Fibre Corporation

#### Product Description

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 <sup>3</sup>	ASTM D792
Melt Mass-Flow Rate (MFR) (19.°C/2,1 kg)	9.0 g/10 min	ASTM D1238
Molding Shrinkage		ASTM D900
Flow: 3.0 mm	1.8%	
Across Flow: 3.0 mm	2.2%	
Water Absorption (Equilibrium, 23°C, 65%RH)	0.22%	ASTM D508

Mechanical	Nominal Value Unit	Test Method
Tensile Strength (Yield)	60.8 MPa	ASTM D638
Tensile Elongation (Break)	6.0%	ASTM D638
Flexural Modulus	2000 MPa	ASTM D790
Flexural Strength	93.2 MPa	ASTM D790
Compressive Strength		ASTM D690
1% Strain	31.4 MPa	
10% Strain	10.8 MPa	

Impact	Nominal Value Unit	Test Method
Notched Izod Impact		ASTM D256
23°C	6.4 J/m	
--	6.4 kJ/m <sup>2</sup>	

Hardness	Nominal Value Unit	Test Method
Rockwell Hardness (M-Scale)	80	ASTM D780

Thermal	Nominal Value Unit	Test Method
Deflection Temperature Under Load		ASTM D648
0.45 MPa, Unannealed	108 °C	
1.8 MPa, Unannealed	110 °C	
Vicat Softening Temperature	172 °C	ASTM D1020
Melting Temperature	170 °C	DSC
CLTE - Flow	0.00080 cm/cm/°C	ASTM D696

Electrical	Nominal Value Unit	Test Method
Surface Resistivity <sup>1</sup>	1.0E+16 ohms	ASTM D257
Volume Resistivity <sup>2</sup> (23°C)	1.0E+14 ohm-cm	ASTM D257

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