

Iupital™ FRC-20

Mitsubishi Engineering-Plastics Corp - Acetal (POM) Copolymer

General Information

Product Description

Chlorine resistant

General

Features	• Chlorine Resistant	
Uses	• Automotive Applications	• Electrical/Electronic Applications
	• Automotive Electronics	• General Purpose

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.39	g/cm ³	ISO 1183
Melt Volume-Flow Rate (MVR) (190°C/2.16 kg)	8.3	cm ³ /10min	ISO 1133
Molding Shrinkage - Flow (3.00 mm)	2.0	%	Internal Method
Water Absorption - 60% RH (23°C)	0.29	%	Internal Method
Mechanical	Nominal Value	Unit	Test Method
Tensile Stress (Yield)	57.0	MPa	ISO 527-2/50
Tensile Strain (Break)	42	%	ISO 527-2/50
Flexural Modulus ²	2300	MPa	ISO 178
Flexural Stress ²	77.0	MPa	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength (23°C)	8.0	kJ/m ²	ISO 179
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load 1.8 MPa, Unannealed	94.0	°C	ISO 75-2/A
Melting Temperature	165	°C	ISO 11357-3

Processing Information

Injection	Nominal Value	Unit
Drying Temperature - Hot Air Dryer	80	°C
Drying Time - Hot Air Dryer	3.0 to 4.0	hr
Rear Temperature	170	°C
Middle Temperature	180	°C
Front Temperature	190	°C
Nozzle Temperature	180 to 210	°C
Mold Temperature	60 to 80	°C
Injection Pressure	50.0 to 100	MPa
Injection Rate	Moderate	
Screw Speed	80 to 120	rpm

