

Kepital® F20-03

Acetal (POM) Copolymer

Korea Engineering Plastics Co., Ltd

PROSPECTOR®

www.ulprospector.com

Technical Data

Product Description

- A medium-viscosity grade for general injection molding

General

Material Status	• Commercial: Active		
Literature ¹	• Technical Datasheet (English)		
UL Yellow Card ²	• E120354-220441		
Search for UL Yellow Card	• Korea Engineering Plastics Co., Ltd • Kepital®		
Availability	• Asia Pacific	• Europe	• North America
Features	• Copolymer	• General Purpose	• Medium-high Viscosity
Uses	• General Purpose		
RoHS Compliance	• RoHS Compliant		
Processing Method	• Injection Molding		
Resin ID (ISO 1043)	• POM		

Physical	Nominal Value Unit	Test Method
Density	1.41 g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	9.0 g/10 min	ISO 1133
Molding Shrinkage - Flow (2.00 mm)	2.0 %	Internal Method
Water Absorption (Equilibrium, 23°C, 50% RH)	0.20 %	ISO 62

Mechanical	Nominal Value Unit	Test Method
Tensile Modulus	2750 MPa	ISO 527-1
Tensile Stress	65.0 MPa	ISO 527-2
Tensile Strain (Yield)	10 %	ISO 527-2
Nominal Tensile Strain at Break	32 %	ISO 527-2
Flexural Modulus	2550 MPa	ISO 178
Flexural Stress	87.0 MPa	ISO 178

Impact	Nominal Value Unit	Test Method
Charpy Notched Impact Strength		ISO 179/1eA
-30°C	5.5 kJ/m ²	
23°C	6.5 kJ/m ²	

Thermal	Nominal Value Unit	Test Method
Deflection Temperature Under Load 1.8 MPa, Unannealed	100 °C	ISO 75-2/A
Melting Temperature	165 °C	ISO 11357-3
CLTE - Flow	1.2E-4 cm/cm/°C	ISO 11359-2

Electrical	Nominal Value Unit	Test Method
Surface Resistivity	1.0E+16 ohms	IEC 60093
Volume Resistivity	1.0E+14 ohms·cm	IEC 60093
Electric Strength	19 kV/mm	IEC 60243-1

Flammability	Nominal Value Unit	Test Method
Flame Rating	HB	UL 94

Injection	Nominal Value Unit
Drying Temperature	80 to 90 °C
Drying Time	3.0 to 4.0 hr
Suggested Max Moisture	0.10 %
Hopper Temperature	60 to 80 °C
Rear Temperature	170 to 180 °C
Middle Temperature	180 to 190 °C



Injection	Nominal Value Unit
Front Temperature	190 to 200 °C
Nozzle Temperature	180 to 210 °C
Mold Temperature	60 to 80 °C
Back Pressure	< 2.00 MPa

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 Prospector 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.

