

# Kepital® F20-52

Acetal (POM) Copolymer

Korea Engineering Plastics Co., Ltd

# PROSPECTOR®

www.ulprospector.com

## Technical Data

### Product Description

- A UV-stabilized medium-viscosity grade for general injection molding
- Developed for applications in automotive interiors and exposed parts

### General

Material Status	• Commercial: Active
Literature <sup>1</sup>	• <a href="#">Technical Datasheet (English)</a>
UL Yellow Card <sup>2</sup>	• <a href="#">E120354-220443</a>
Search for UL Yellow Card	• <a href="#">Korea Engineering Plastics Co., Ltd</a> • <a href="#">Kepital®</a>
Availability	• Asia Pacific • Europe • North America
Additive	• UV Stabilizer
Features	• Copolymer • Medium Viscosity • UV Stabilized • Weather Resistant
Uses	• Automotive Interior Parts • General Purpose
RoHS Compliance	• RoHS Compliant
Automotive Specifications	• GM EDS-M-5205-11
Processing Method	• Injection Molding
Resin ID (ISO 1043)	• POM

Physical	Nominal Value Unit	Test Method
Density	1.41 g/cm <sup>3</sup>	ISO 1183
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	10 g/10 min	ISO 1133
Molding Shrinkage - Flow (3.00 mm)	2.0 %	Internal Method
Water Absorption (Equilibrium, 23°C, 50% RH)	0.20 %	ISO 62

Mechanical	Nominal Value Unit	Test Method
Tensile Modulus	2600 MPa	ISO 527-2
Tensile Stress	63.0 MPa	ISO 527-2
Tensile Strain		ISO 527-2
Yield	10 %	
Break	35 %	
Flexural Modulus	2350 MPa	ISO 178
Flexural Stress	83.0 MPa	ISO 178

Impact	Nominal Value Unit	Test Method
Charpy Notched Impact Strength		ISO 179/1eA
-30°C	5.5 kJ/m <sup>2</sup>	
23°C	6.0 kJ/m <sup>2</sup>	

Thermal	Nominal Value Unit	Test Method
Heat Deflection Temperature		ISO 75-2/A
1.8 MPa, Unannealed	92.0 °C	
Melting Temperature <sup>4</sup>	165 °C	ISO 11357-3
CLTE - Flow	1.3E-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 100 °C



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

## Notes

<sup>1</sup> 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.

<sup>2</sup> 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.

<sup>3</sup> Typical properties: these are not to be construed as specifications.

<sup>4</sup> 10°C/min

