

# PRODUCT INFORMATION

Metric &amp; SI unit

## Acetal Copolymer

# KEPITAL®

KOREA ENGINEERING PLASTICS CO.,LTD.

# F20-52

A medium viscosity U.V. stabilized grade suitable for out door use.

Property	Test Method	Units	Value
<b>Physical</b>			
Specific Gravity	ASTM D792	–	1.41
Water Absorption	ASTM D570	%	0.22
<b>Thermal</b>			
Melt Index	ASTM D1238	g/10min	10
Melting Point	ASTM D3418	°C	165
Heat Deflection Temperature	ASTM D648	°C	158
			110
Coeff. of Linear Thermal Expansion	ASTM D696	$\times 10^{-5}$ cm/cm/°C	13
Flammability	UL94	–	HB
<b>Mechanical</b>			
Tensile Strength	ASTM D638	kg <sub>f</sub> /cm <sup>2</sup> (MPa)	580 (57)
Tensile Elongation	ASTM D638	%	55
Flexural Strength	ASTM D790	kg <sub>f</sub> /cm <sup>2</sup> (MPa)	820 (80)
Flexural Modulus	ASTM D790	$\times 10^4$ kg <sub>f</sub> /cm <sup>2</sup> (MPa)	2.50 (2,450)
Shear Strength	ASTM D732	kg <sub>f</sub> /cm <sup>2</sup> (MPa)	560 (55)
Notched Izod Impact Strength	ASTM D256	kg <sub>f</sub> · cm/cm (J/m)	6.0 (59)
Rockwell Hardness	ASTM D785	–	M80
<b>Electrical</b>			
Dielectric Constant	ASTM D150	–	3.7
Dielectric Dissipation Factor	ASTM D150	–	0.007
Surface Resistivity	ASTM D257	Ω	$1 \times 10^{16}$
Volume Resistivity	ASTM D257	Ω · cm	$1 \times 10^{14}$
Dielectric Strength	ASTM D149	kV/mm	19
Molding Shrinkage (//Direction)		%	2.0

**Properties are subject to change with a new knowledge and development.**

Although the information and recommendations set forth herein are presented in good faith and believed to be correct, we recommend that persons receiving information must make their own determination as to its suitability to their purposes prior to use. These are based on natural colored products only through relevant test methods and conditions. The KOREA ENGINEERING PLASTICS CO., LTD. assumes no warranty or liability of, express or implied, as to the accuracy or completeness thereof, or any other nature regarding designs, products, or information may be used without infringing the intellectual property rights of others. Further, the data furnished by KEP are not intent to replace any testing required to determine a suitability of any application and set a specification limit for design.

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# F20-52

A medium viscosity U.V. stabilized grade suitable for out door use.

Property	Test Method	Units	Value
<b>Physical</b>			
Specific Gravity	ASTM D792	–	1.41
Water Absorption 23 °C (73°F), 60%RH	ASTM D570	%	0.22
<b>Thermal</b>			
Melt Index	ASTM D1238	g/10min	10
Melting Point 10 °C/min	ASTM D3418	°C (°F)	165 (329)
Heat Deflection Temperature 4.6kg <sub>f</sub> /cm <sup>2</sup> (64psi) 18.6kg <sub>f</sub> /cm <sup>2</sup> (264psi) <sup>1</sup>	ASTM D648	°C (°F)	158 (316) 110 (230)
Coeff. of Linear Thermal Expansion 20 ~ 80 °C	ASTM D696	x 10 <sup>-5</sup> cm/cm/°C	13
Flammability t 0.8mm(t 0.03in)	UL94	–	HB
<b>Mechanical</b>			
Tensile Strength 23 °C (73°F)	ASTM D638	kg <sub>f</sub> /cm <sup>2</sup> (psi)	580 (8,300)
Tensile Elongation 23 °C (73°F)	ASTM D638	%	55
Flexural Strength 23 °C (73°F)	ASTM D790	kg <sub>f</sub> /cm <sup>2</sup> ( x 10 <sup>3</sup> psi)	820 (11.7)
Flexural Modulus 23 °C (73°F)	ASTM D790	x 10 <sup>4</sup> kg <sub>f</sub> /cm <sup>2</sup> ( x 10 <sup>4</sup> psi)	2.50 (35.6)
Shear Strength t 2mm (t 0.08in)	ASTM D732	kg <sub>f</sub> /cm <sup>2</sup> (psi)	560 (8,000)
Notched Izod Impact Strength t 3.2mm (t 0.126in)	ASTM D256	kg <sub>f</sub> · cm/cm(ft · lb/in)	6.0 (1.1)
Rockwell Hardness M scale	ASTM D785	–	M80
<b>Electrical</b>			
Dielectric Strength 10 <sup>6</sup> Hz	ASTM D150	–	3.7
Dielectric Dissipation Factor 10 <sup>6</sup> Hz	ASTM D150	–	0.007
Surface Resistivity	ASTM D257	Ω	1 x 10 <sup>16</sup>
Volume Resistivity	ASTM D257	Ω · cm	1 x 10 <sup>14</sup>
Dielectric Strength	ASTM D149	kV/mm	19
Molding Shrinkage (//Direction) t 3mm, Φ 100mm		%	2.0

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