

PRODUCT INFORMATION(Metric and SI unit)

Acetal Copolymer KEPITAL®

KOREA ENGINEERING PLASTICS CO.,LTD.

F20-52

A medium viscosity grade, natural color, for weather resistance purpose. It has stability on UV light, and so good at out-door use.

Property	Test Method	Units	Value
Physical			
Specific Gravity	ASTM D792	—	1.41
Water Absorption 23 °C, 60%RH	ASTM D570	%	0.22
Thermal			
Melt Index	ASTM D1238	g/10min	10
Melting Point 10 °C/min	DSC Method	°C	165
Heat Deflection Temperature 4.6kgf/cm ² (0.5MPa)	ASTM D648	°C	158
18.6kgf/cm ² (1.8MPa)			110
Coeff. of Linear Thermal Expansion 20 ~ 80 °C	ASTM D696	x 10 ⁻⁵ cm/cm/°C	13
Flammability t 0.8mm	UL94	—	HB
Mechanical			
Tensile Strength 23 °C	ASTM D638	kgf/cm ² (MPa)	580 (57)
Tensile Elongation 23 °C	ASTM D638	%	55
Flexural Strength 23 °C	ASTM D790	kgf/cm ² (MPa)	820 (80)
Flexural Modulus 23 °C	ASTM D790	x 10 ⁴ kgf/cm ² (MPa)	2.50 (2,450)
Shear Strength t 2mm	ASTM D732	kgf/cm ² (MPa)	560 (55)
Notched Izod Impact Strength t 3.2mm	ASTM D256	kgf cm/cm (J/m)	6.0 (59)
Rockwell Hardness M scale	ASTM D785	—	M80
Electrical			
Dielectric Constant 10 ⁶ Hz	ASTM D150	—	3.7
Dielectric Dissipation Factor 10 ⁶ Hz	ASTM D150	—	0.007
Surface Resistivity	ASTM D257	Ω	1 x 10 ¹⁶
Volume Resistivity	ASTM D257	Ω cm	1 x 10 ¹⁴
Dielectric Strength	ASTM D149	kV/mm	19
Molding Shrinkage (//Direction) t 3mm, Φ 100mm		%	2.0

Properties shown in above are not guaranteed data but a typical property acquired through relevant test methods and conditions based on for natural colored products only. These 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. The KOREA ENGINEERING PLASTICS CO., LTD. ASSUMES NO WARRANTY AND LIABILITY of, express or implied, as to the accuracy or completeness thereof, or of merchantability, fitness for a particular purpose, or of any other nature regarding designs, products, data 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.

KOREA ENGINEERING PLASTICS CO., LTD.
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PRODUCT INFORMATION(Metric and US unit)

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F20-52

A medium viscosity grade, natural color, for weather resistance purpose. It has stability on UV light, and so good at out-door use.

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

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