

PRODUCT INFORMATION

Metric & SI unit

Acetal Copolymer
KEPITAL®

KOREA ENGINEERING PLASTICS CO.,LTD.

TE-21

A medium viscosity grade for general injection molding. It was modified with elastomer, and suitable for parts requiring much higher impact resistance and toughness.

Property	Test Method	Units	Value
Physical			
Specific Gravity	ASTM D792	—	1.39
Water Absorption 23℃, 60%RH	ASTM D570	%	0.22
Thermal			
Melt Index 190℃, 2.16 kg	ASTM D1238	g/10min	11.0
Melting Point 10℃/min	ASTM D3418	℃	165
Heat Deflection Temperature 4.6kg _f /cm ² (0.5MPa)	ASTM D648	℃	100
18.6kg _f /cm ² (1.8MPa)			13
Coeff. of Linear Thermal Expansion 20~80℃	ASTM D696	x 10 ⁻⁵ cm/cm/℃	13
Flammability t 0.8mm	UL94	—	HB
Mechanical			
Tensile Strength 23℃	ASTM D638	kg _f /cm ² (MPa)	545 (53)
Tensile Elongation 23℃	ASTM D638	%	130
Weld Elongation 23℃	ASTM D638	%	20
Flexural Strength 23℃	ASTM D790	kg _f /cm ² (MPa)	770 (76)
Flexural Modulus 23℃	ASTM D790	x 10 ⁴ kg _f /cm ² (MPa)	2.25 (2,206)
Notched Izod Impact Strength t 3.2mm	ASTM D256	kg _f · cm/cm (J/m)	10.5 (103)
Electrical			
Dielectric Constant 10 ⁶ Hz	ASTM D150	—	-
Dielectric Dissipation Factor 10 ⁶ Hz	ASTM D150	—	-
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	-
Molding Shrinkage (//Direction) t2mm, Φ 100mm		%	1.5

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.

KOREA ENGINEERING PLASTICS CO., LTD.
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Metric & US unit

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A medium viscosity grade for general injection molding. It was modified with elastomer, and suitable for parts requiring much higher impact resistance and toughness.

Property	Test Method	Units	Value
Physical			
Specific Gravity	ASTM D792	—	1.39
Water Absorption	ASTM D570	%	0.22
Thermal			
Melt Index	ASTM D1238	g/10min	11.0
Melting Point	ASTM D3418	°C (°F)	165 (329)
Heat Deflection Temperature	ASTM D648	°C (°F)	100 (212)
Coeff. of Linear Thermal Expansion	ASTM D696	$\times 10^{-5}$ cm/cm/°C	13
Flammability	UL94	—	HB
Mechanical			
Tensile Strength	ASTM D638	kg _f /cm ² (psi)	545 (7,752)
Tensile Elongation	ASTM D638	%	130
Weld Elongation	ASTM D638	%	20
Flexural Strength	ASTM D790	kg _f /cm ² ($\times 10^3$ psi)	770 (11.0)
Flexural Modulus	ASTM D790	$\times 10^4$ kg _f /cm ² ($\times 10^4$ psi)	2.25 (32.0)
Notched Izod Impact Strength	ASTM D256	kg _f · cm/cm(ft · lb/in)	10.5 (1.9)
Electrical			
Dielectric Strength	ASTM D150	—	—
Dielectric Dissipation Factor	ASTM D150	—	—
Surface Resistivity	ASTM D257	Ω	1×10^{16}
Volume Resistivity	ASTM D257	Ω · cm	1×10^{14}
Dielectric Strength	ASTM D149	kV/mm	—
Molding Shrinkage (//Direction)		%	1.5

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