

PRODUCT INFORMATION**Toughened Grade**

KOCETAL[®] UR304BK

Kocetal UR304BK is impact strength modified grade suitable for fastener and switch.

Property	Test Method	Units	Value
Physical			
Melt Index	ASTM D1238	g/10min	9.0
Specific Gravity	ASTM D792	-	1.36
Shrinkage	ASTM D955	%	1.7
Water Absorption 23℃, Equilibrium 60%RH	ASTM D570	%	0.25
Thermal			
Melting Point	ASTM D1525	℃	166
Heat Deflection Temperature under Load	ASTM D648		
HDT/A 0.45 MPa (4.6 kg/cm ²)		℃	145
HDT/A 1.82 MPa (18.6 kg/cm ²)		℃	82
Vicat Softening Temperature	ASTM D1525	℃	
Coeff. Of Linear Thermal Expansion	ASTM D696	× 10 ⁻⁵ cm/cm·℃	13
Flammability	UL 94		HB
Mechanical			
Tensile Strength 23℃	ASTM D638	MPa (kg/cm ²)	45 (460)
Tensile Elongation 23℃	ASTM D638	%	130
Flexural Strength 23℃	ASTM D790	MPa (kg/cm ²)	59 (600)
Flexural Modulus 23℃	ASTM D790	MPa (kg/cm ²)	1,800 (1,8500)
Notched Izod Impact Strength 23℃	ASTM D256	J/m (kg cm/cm)	128 (12.9)
Rockwell Hardness M scale	ASTM D785	-	76
Electrical			
Surface Resistivity	ASTM D257	× 10 ¹⁶ Ω	1
Volume Resistivity	ASTM D257	× 10 ¹⁴ Ω cm	1
Dielectric Strength	ASTM D149	kV/mm	19
Dielectric Constant	ASTM D150	-	3.7
Dielectric Dissipation FactorConstant 10 ⁶ Hz	ASTM D150	-	0.006

**KOLON PLASTICS, Inc.**