KOLON PLASTICS

KOCETAL® CB301

Polyacetal + Carbon Black, Conductive, Extrusion & Injection Molding, High Viscosity

Properties	Measurement condition	Test Method	Unit	Typical value
Physical				
Density		ISO 1183	g/cm^3	1.40
Melt Flow Index	190 ℃, 2.16 kg	ISO 1133	g/10min	1.0
Melt Volume Rate	190 ℃, 2.16 kg	ISO 1133	cm^3/10min	-
Shrinkage		ISO 294-4	%	1.7-1.9
The value of the shrinkage factor in the above data is the value measured under the specific injection condition using our standard test piece and may be changed according to other test piece (product) and condition. Please contact us when making molds.				
Water Absorption	23 ℃, 50% RH	ISO 62	%	0.22
Mechanical				
Tensile Strength at Break (4.0mm	50 mm/min	ISO 527	MPa	50
Elongation at Break (4.0mm)	50 mm/min	ISO 527	%	7.5
Flexural Strength (4.0mm)	2 mm/min	ISO 178	MPa	77
Flexural Modulus (4.0mm)	2 mm/min	ISO 178	MPa	2,350
Charpy Impact Strength, (4.0mm)		ISO 179/1eA		
(Notched)	23 ℃		kJ/m^2	5.5
	-30 ℃		kJ/m^2	-
Rockwell Hardness	M scale	ISO 2039-2	-	75
Thermal				
Melting Point	20 ℃/min	ISO 11357-1	℃	167
Heat Deflection Temperature	1.8 MPa	ISO 75	℃	80
Coefficient of linear expansion		ISO 11359	$\times E^{-6}/K$	-
Flammability (0.8mm)		UL94	Class	HB
Electrical				
Dielectric Strength		IEC 60243	kV/mm	-
Volume Resistivity		IEC 60093	Ω·cm	-
Surface Resistivity		IEC 60093	Ω	1×10^3

※ (Test specimen Thickness)

Processing Guide (Injection Molding)

Drying Temperature(℃)	80 ~ 90	(Dehumidifying Dryer)		
Drying Time(hr)	3 ~ 5			
Limitation of Processing Temperature(℃)	220			
Processing Moisture Contents(%)	≤ 0.1			
Cylinder Temperature(℃)	Nozzle	Front	Middle	Rear
	190 ~ 210	190 ~ 210	180 ~ 200	170 ~ 190
Mold Temperature(℃)	60 ~ 90			