

KOCETAL[®] K100HS

Polyacetal, High-strength, Injection molding, High-viscosity

Properties	Measurement condition	Test Standard	Unit	Value
Physical Properties				
Density		ISO 1183	g/cm ³	1.41
Melt Flow Index	190 °C, 2.16 kg	ISO 1133	g/10min	3.0
Melt Volume Rate	190 °C, 2.16 kg	ISO 1133	cm ³ /10min	2.6
Shrinkage		ISO 294-4	%	2.0-2.4
Water Absorption	23 °C, 50% RH	ISO 62	%	0.22
Mechanical Properties				
Tensile Strength at Yield (4.0mm)	50 mm/min	ISO 527	MPa	66
Elongation at Break (4.0mm)	50 mm/min	ISO 527	%	40
Strain at Yield (4.0mm)	50 mm/min	ISO 527	%	15
Flexural Strength (4.0mm)	2 mm/min	ISO 178	MPa	85
Flexural Modulus (4.0mm)	2 mm/min	ISO 178	MPa	2,650
Charpy Impact Strength (4.0mm)		ISO 179/1eA		
(Notched)	23 °C		kJ/m ²	11.0
	-30 °C		kJ/m ²	-
Rockwell Hardness	M scale	ISO 2039-2	-	78
Thermal Properties				
Melting Temperature	20 °C/min	ISO 11357-1	°C	172
Heat Deflection Temperature	1.8 MPa	ISO 75	°C	90
Coefficient of linear expansion		ISO 11359	× E ⁻⁶ /K	-
Flammability (0.8mm)		UL94	Class	HB
Electrical Properties				
Dielectric Strength		IEC 60243	kV/mm	-
Volume Resistivity		IEC 60093	Ω·cm	-
Surface Resistivity		IEC 60093	Ω	-

※ (Test specimen Thickness)



Processing Guide (Injection Molding)

Drying Temperature(°C)	80 ~ 120	(Dehumidifying Dryer)			
Drying Time(hr)	3 ~ 5				
Limitation of Processing Temperature(°C)	220				
Processing Moisture Contents(%)	≤ 0.1				
Cylinder Temperature(°C)	Nozzle	Front	Middle	Rear	
	180 ~ 200	180 ~ 200	170 ~ 190	160 ~ 180	
Mold Temperature(°C)	60 ~ 80				

