

KOCETAL[®] K500HS

Polyacetal, High-Strength, Injection Molding, Medium-Viscosity

Properties	Measurement condition	Test Method	Unit	Typical value
Physical				
Density		ISO 1183	g/cm ³	1.41
Melt Flow Index	190 °C, 2.16 kg	ISO 1133	g/10min	15.0
Melt Volume Rate	190 °C, 2.16 kg	ISO 1133	cm ³ /10min	12.5
Shrinkage		ISO 294-4	%	1.8-2.2
Water Absorption	23 °C, 50% RH	ISO 62	%	0.22
Mechanical				
Tensile Strength at Yield (4.0mm)	50 mm/min	ISO 527	MPa	68
Elongation at Break (4.0mm)	50 mm/min	ISO 527	%	30
Strain at Yield, (4.0mm)	50 mm/min	ISO 527	%	10
Flexural Strength (4.0mm)	2 mm/min	ISO 178	MPa	90
Flexural Modulus (4.0mm)	2 mm/min	ISO 178	MPa	2,800
Charpy Impact Strength, (4.0mm)		ISO 179/1eA		
(Notched)	23 °C		kJ/m ²	8.0
	-30 °C		kJ/m ²	-
Rockwell Hardness	M scale	ISO 2039-2	-	82
Thermal				
Melting Point	20 °C/min	ISO 11357-1	°C	173
Heat Deflection Temperature	1.8 MPa	ISO 75	°C	95
Coefficient of linear expansion		ISO 11359	× 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	-
※ (Test specimen Thickness)				



Processing Guide (Injection Molding)

Drying Temperature(°C)	80 ~ 90	(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				

