

KOCETAL[®] MS301

Polyacetal + Molibdenum disulfide, Tribological grade, Injection Molding, Medium Viscosity

Properties	Measurement condition	Test Method	Unit	Typical value
Physical				
Specific Gravity		ASTM D792	—	1.41
Melt Flow Index	190 °C, 2.16 kg	ASTM D1238	g/10min	9.0
Shrinkage		ASTM D955	%	1.5-2.1
Water Absorption	23 °C, H ₂ O, 24 hr	ASTM D570	%	0.21
Mechanical				
Tensile Strength at Yield (3.2mm)	20 mm/min	ASTM D638	MPa	58
Nominal Strain at Break(3.2mm)	20 mm/min	ASTM D638	%	35
Flexural Strength (3.2mm)	10 mm/min	ASTM D790	MPa	95
Flexural Modulus (3.2mm)	10 mm/min	ASTM D790	MPa	2,700
Izod Impact Strength (6.4mm)		ASTM D256		
(Notched)	23 °C		J/m	65
	-30 °C		J/m	—
Rockwell Hardness	M scale	ASTM D785	—	80
Thermal				
Melting Point	20 °C/min	ASTM D1525	°C	167
Heat Deflection Temperature	1.8 MPa	ASTM D648	°C	100
Coefficient of linear expansion		ASTM D696	× 10 ⁻⁵ cm/cm · °C	13
Flammability (0.8mm)		UL94	Class	HB
Electrical				
Dielectric Strength		IEC 60243	kV/mm	—
Volume Resistivity		IEC 60093	Ω · cm	—
Surface Resistivity		IEC 60093	Ω /sq	—

※ 1Mpa = 10.197162 Kgf/cm², 1J/m = 0.10197 Kgf · cm/cm, (Test specimen Thickness)



Processing Guide (Injection Molding)

Drying Temperature(℃)	80 ~ 90	{Dehumidifying Dryer}			
Drying Time(hr)	3 ~ 5				
Processing Moisture Contents(%)	≤ 0.1				
Cylinder Temperature(℃)	Nozzle	Front	Middle	Rear	
	180 ~ 200	180 ~ 200	170 ~ 190	160 ~ 180	
Mold Temperature(℃)	60 ~ 80				

