

Typical properties of Xydar® MG-350HF

Properties	Unit	Method (ASTM)	MG-350HF	
Tensile strength (3.2mmT)	MPa	D638	108	
Tensile Modulus (3.2mmT)	GPa		13.6	
Elongation (3.2mmT)	%		2.2	
Flexural strength (3.2mmT)	MPa	D790	145	
Flexural modulus (3.2mmT)	GPa		13.9	
Poisson's ratio	—	—	0.33	
Izod impact strength (un-notched)	kJ/m ²	D256	45	
Rockwell hardness	R scale	D785	97	
Specific gravity	—	D792	1.76	
Water absorption	%	D570	0.02	
Deflection temperature under load (load 1.82MPa)	degree C	D648	265	
Thermal conductivity	kcal/m·hr·°C	F433	0.310	
Flammability rating (V-0 applied thickness)	mm	UL94	0.30	
Oxygen index	%	D2863	46	
Dielectric strength	KV/mm	D149	34.9	
Arc resistance	sec	D495	—	
Volume resistivity	×10 ¹⁵ Ω·cm	D257	26.0	
Surface resistivity	×10 ¹⁵ Ω		18.5	
Dielectric constant	10 ² Hz 10 ⁶ Hz	— —	D150	4.2 4.2
Dielectric dissipation factor	10 ² Hz 10 ⁶ Hz	— —	D150	0.013 0.029

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Coefficient of Linear Thermal Expansion

Unit: $10^{-5}\text{cm}/\text{cm}/^\circ\text{C}$

Grade	Direction *	Range of Temperature ($^\circ\text{C}$)			
		50-100	100-150	150-200	200-250
NC-301 BL	MD	0.8	0.9	0.8	0.5
	TD	4.5	5.6	6.5	7.3

Direction* : MD = Machine Direction

TD = Transversal Direction

Molding Conditions

		Conditions
Cylinder Temperature ($^\circ\text{C}$)	Aft	300~320
	Mid	320~350
	Front	340~360
Nozzle Temperature ($^\circ\text{C}$)		340~360
Mold Temperature ($^\circ\text{C}$)		40~120
Injection Pressure (MPa)		30~120
Injection Speed		Mid ~ High

Remark)

* Please apply Drying @150°C over 8 hours. This procedure is definitely necessary in order to prevent decay of material.