

## Typical properties of Xydar® FC-110B

Properties	Unit	Method (ASTM)	FC-110B	
抗拉强度 Tensile strength (3.2mmT)	MPa	D638	145	
抗拉弹性率 Tensile Modulus (3.2mmT)	GPa		20.7	
抗拉伸率 Elongation (3.2mmT)	%		1.7	
弯曲强度 Flexural strength (3.2mmT)	MPa	D790	198	
弯曲弹性率 Flexural modulus (3.2mmT)	GPa		15.8	
泊松比 Poisson's ratio	—	—	0.41	
Izod冲击强度 Izod impact strength (Unnotched - 无缺口)	kJ/m <sup>2</sup>	D256	61	
洛氏硬度 Rockwell hardness	R scale	D785	79	
比重 Specific gravity	—	D792	1.70	
吸水率 Water absorption	%	D570	0.02	
热变形温度(1.82MPa) Deflection temperature under load (load 1.82MPa)	degree C	D648	345	
导热系数 Thermal conductivity	kcal/m·hr·°C	F433	0.268	
難燃性 Flammability rating (V-0 applied thickness)	mm	UL94	0.17	
氧指数 Oxygen index	%	D2863	45	
耐电强度 Dielectric strength	KV/mm	D149	20.1	
耐电弧 Arc resistance	sec	D495	192	
体积抵抗率 Volume resistivity	×10 <sup>15</sup> Ω·cm	D257	4.0	
表面抵抗率 Surface resistivity	×10 <sup>15</sup> Ω		NA	
介电常数 Dielectric constant	10 <sup>2</sup> Hz 10 <sup>6</sup> Hz	— —	D150	4.6 3.9
介电损耗因数 Dielectric dissipation factor	10 <sup>2</sup> Hz 10 <sup>6</sup> Hz	— —	D150	0.008 0.032

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【線膨張係數 (Coefficient of Linear Thermal Expansion) and 成形收縮率 (Molding shrinkage)】

品級 Grade	方向 Direction *	線膨張係數 (Coefficient of Linear Thermal Expansion) (Unit: $10^{-5}$ cm/cm/°C)					成形收縮率 (Molding shrinkage) (%)	
		溫度範圍 Range of Temperature (°C)						
		50-100	100-150	150-200	200-250	250-300		
FC-110B	MD	0.7	2.7	-0.1	-0.5	-0.8	0.01	
	TD	8.0	9.2	10.3	11.3	12.4	1.12	

Direction \* : MD = 竖向 Machine Direction  
TD = 橫向 Transversal Direction

【成形條件 (Molding Conditions)】

		Conditions
Cylinder Temperature (°C) 料管溫度	Aft 后部	350~380
	Mid 中部	370~400
	Front 前部	390~420
Nozzle Temperature 噴嘴 (°C)		390~420
Mold Temperature 摸溫 (°C)	100~170	
Injection Pressure 射出壓力 (MPa)	40~120	
Injection Speed 射出速度	Mid ~ High	

(Remark)

Please apply Drying @150°C over 4 hours. This procedure is definitely necessary in order to prevent decay of material.

成形前には必ず事前乾燥 (150°C以上4時間以上) をお願いします。

一般用热风干燥机或露头干燥机以150度干燥起码4小时或以上。