



# PET 系列複合材料物性表

## compound datasheets

項目 Property		試驗法 ASTM Method	單位 Units	PET, GF30, PTFE15	PET, GF30	PET, GF45	PET FR, GF30	
一般性質	比重 Specific Gravity	D792	-	1.68	1.56	1.68	1.69	
	成型收縮率 Mold Shrinkage	6.35mm截面	D955	%	-	-	-	
		3.18mm截面			0.2	0.1~0.3	0.1~0.3	0.1~0.3
吸水率(24 hours) Water absorption, 24 hrs @ 23°C		D570	%	-	-	-	0.05	
機械性質	衝擊強度 Impact Strength	3.18mm截面(缺口) Notched Izod	D256	J/m	75	80	91	69
		3.18mm截面(無缺口) Unnotched Izod			534	641	747	374
	伸張強度 Tensile Strength	D638	MPa	124	152	179	90	
	延伸率 Tensile Elongation	D638	%	2~3	3~5	3~5	1.5~2.5	
	伸張模數 Tensile Modulus	D638	MPa	9653	11032	16548	12066	
	彈性強度 Flexural Strength	D790	MPa	193	221	265	138	
	彈性模數 Flexural Modulus	D790	MPa	9308	9653	13790	11377	
洛氏硬度 Rockwell Hardness	D785	-	-	-	-	120 R		
熱性質	熱變形溫度 DTUL	at 264 psi ( 1.82 MPa)	D648	°C	227	224	227	227
		at 66 psi (0.455 MPa)			-	-	-	243
	連續使用溫度 Continuous Use Temp.	UL-746B	°C	-	-	-	-	
	線性熱膨脹係數 Coefficient of Linear Thermal Expansion	D 696	10 <sup>-5</sup> /°C	-	-	-	-	
防火等級 Flammability thickness	-	-	-	*HB @ 1.5 mm	-	-	V-0 @ 1.5 mm	
電氣性質	體積固有電阻 Volume Resistivity	D257	ohm-cm	-	-	-	>1e16	
	表面電阻 Surface Resistivity	D257	ohm/SQ	-	-	-	-	
	靜電消散(MIL-PRF-81705C) Static Decay	FTMS-4046.1	sec	-	-	-	-	

\* Tested by factory.

Data are obtained from specimens molded under carefully controlled conditions from representative samples of the compound described herein. Properties may be materially affected by molding techniques applied and by the size and shape of the item molded. No assurance can be implied that all molded articles will have the same properties as those listed.