



PC 系列複合材料物性表

compound datasheets

項目 Property		試驗法 ASTM Method	單位 Units	PC, GF10	PC, GF20	PC, GF30	PC FR, GF10	PC FR, GF20	PC FR, GF30	PC, CF10	PC, CF15	
一般性質	比重 Specific Gravity	D792	-	1.26	1.33	1.42	1.26	1.34	1.43	1.24	1.26	
	成型收縮率 Mold Shrinkage	6.35mm截面	D955	%	-	-	-	-	-	-	-	
		3.18mm截面			0.5~0.7	0.2~0.4	0.1~0.3	0.3~0.5	0.2~0.4	0.1~0.3	0.1~0.3	0.1~0.35
吸水率(24 hours) Water absorption, 24 hrs @ 23°C	D570	%	-	-	-	0.1	0.09	0.07	-	-		
機械性質	衝擊強度 Impact Strength	3.18mm截面(缺口) Notched Izod	D256	J/m	107	133	160	214	133	160	80	107
		3.18mm截面(無缺口) Unnotched Izod			1869	961	961	No Break	694	801	587	641
	伸張強度 Tensile Strength	D638	MPa	63	103	124	58	103	124	107	100	
	延伸率 Tensile Elongation	D638	%	8~9	4~5	3~4	>10	3~4	2.5~3.5	3~5	3~5	
	伸張模數 Tensile Modulus	D638	MPa	3792	5861	8274	3792	6206	8964	7584	8619	
	彈性強度 Flexural Strength	D790	MPa	103	172	197	100	165	186	162	162	
	彈性模數 Flexural Modulus	D790	MPa	3448	5516	7584	3448	5516	8274	6206	7584	
洛氏硬度 Rockwell Hardness	D785	-	-	-	-	118 R	118 R	119 R	-	-		
熱性質	熱變形溫度 DTUL	at 264 psi (1.82 MPa)	D648	°C	138	141	-	141	143	146	-	-
		at 66 psi (0.455 MPa)			-	-	-	146	146	149	-	-
	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 ⁻⁵ /°C	-	-	-	-	-	-	-	-	
防火等級 Flammability thickness	-	-	*HB @ 1.5 mm	*HB @ 3 mm	*HB @ 1.5 mm	V-0 @ 1.5 mm	V-0 @ 1.5 mm	V-0 @ 1.5 mm	*HB @ 1.5 mm	-		
電氣性質	體積固有電阻 Volume Resistivity	D257	ohm-cm	-	-	-	>1e16	>1e16	>1e16	<1e6	<1e4	
	表面電阻 Surface Resistivity	D257	ohm/SQ	-	-	-	-	-	-	-	<1e6	
	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.