



PC 系列複合材料物性表

compound datasheets

項目 Property		試驗法 ASTM Method	單位 Units	PC, Anti-static	PC FR, Anti-static	PC, CB	PC, CB, GF10	PC FR, CB	PC, CF-1	PC, CF-2	PC, SSF10
一般性質	比重 Specific Gravity	D792	-	1.19	1.3	1.21	1.31	1.28	1.23	1.26	1.3
	成型收縮率 Mold Shrinkage	6.35mm截面	%	-	-	-	-	-	-	-	-
		3.18mm截面		0.6~0.9	0.5~0.7	0.6~0.8	0.3~0.5	0.5~0.8	0.1~0.3	0.1~0.3	0.6~0.7
吸水率(24 hours) Water absorption, 24 hrs @ 23°C	D570	%	-	-	-	-	-	0.12	-	-	
機械性質	衝擊強度 Impact Strength	3.18mm截面(缺口) Notched Izod	J/m	641	187	85	48	43	64	53	80
		3.18mm截面(無缺口) Unnotched Izod		No Break	1281	No Break	481	1495	481	481	No Break
	伸張強度 Tensile Strength	D638	MPa	45	52	59	57	64	100	90	62
	延伸率 Tensile Elongation	D638	%	>10	6~8	8	5~7	8~12	3	2~3	7~10
	伸張模數 Tensile Modulus	D638	MPa	1655	2758	2412	3996	2758	6890	5512	2620
	彈性強度 Flexural Strength	D790	MPa	62	86	95	100	107	152	138	103
	彈性模數 Flexural Modulus	D790	MPa	1793	2758	2687	3858	2758	6201	5512	2620
洛氏硬度 Rockwell Hardness	D785	-	-	-	-	-	-	-	-	-	
熱性質	熱變形溫度 DTUL	at 264 psi (1.82 MPa)	°C	104	124	129	-	127	138	138	-
		at 66 psi (0.455 MPa)		110	-	-	-	143	-	-	
	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	V-0 @ 1.5 mm	*HB @ 1.59 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	1e8~1e11	1e8~1e10	<10e3	10e3~10e5	<1e4	max10e3	<10e5	<10
	表面電阻 Surface Resistivity	D257	ohm/SQ	1e10~1e12	1e10~1e11	<10e6	10e5~10e7	<1e7	max10e5	<10e6	<1e4
	靜電消散(MIL-PRF-81705C) Static Decay	FTMS-4046.1	sec	<2	<2	<2	<2	<2	<2	<2	<2

* 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.