



PS 系列複合材料物性表

compound datasheets

項目 Property		試驗法 ASTM Method	單位 Units	PS, CB	PS Hi, CB	PS Hi, ICP	PS, CNT-1	PS, CNT-2
一般性質	比重 Specific Gravity	D792	-	1.1	1.11	1.05	1.06	1.06
	成型收縮率 Mold Shrinkage	6.35mm截面	%	-	-	-	-	-
		3.18mm截面		0.4~0.6	0.5~0.6	0.7~0.8	0.4~0.7	0.4~0.7
吸水率(24 hours) Water absorption, 24 hrs @ 23°C	D570	%	-	0.6	-	-	-	
機械性質	衝擊強度 Impact Strength	3.18mm截面(缺口) Notched Izod	J/m	107	80	32	27	27
		3.18mm截面(無缺口) Unnotched Izod		534	267	160	214	160
	伸張強度 Tensile Strength	D638	MPa	19	20	32	31	31
	延伸率 Tensile Elongation	D638	%	6~10	2~4	2~5	4~8	4~8
	伸張模數 Tensile Modulus	D638	MPa	1724	2343	1929	2758	2758
	彈性強度 Flexural Strength	D790	MPa	38	37	38	55	55
	彈性模數 Flexural Modulus	D790	MPa	1724	2205	1860	2758	2758
洛氏硬度 Rockwell Hardness	D785	-	-	-	-	-	-	
熱性質	熱變形溫度 DTUL	at 264 psi (1.82 MPa)	°C	-	79	-	-	-
		at 66 psi (0.455 MPa)		-	93	-	-	-
	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	-	-	-	-	-	-	-	
電氣性質	體積固有電阻 Volume Resistivity	D257	ohm-cm	<1e3	max10e2	10e4~10e5	<1e5	1e0~1e2
	表面電阻 Surface Resistivity	D257	ohm/SQ	<1e6	max10e5	10e6~10e7	<1e10	1e4~1e6
	靜電消散(MIL-PRF-81705C) Static Decay	FTMS-4046.1	sec	<2	<2	-	-	-

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.