



# PEI 系列複合材料物性表

## compound datasheets

項目 Property		試驗法 ASTM Method	單位 Units	PEI, CNT-1	PEI, CNT-2	PEI, CF	PEI, SSF10	
一般性質	比重 Specific Gravity	D792	-	1.28	1.28	1.4	1.36	
	成型收縮率 Mold Shrinkage	D955	%	6.35mm截面	-	-	-	
				3.18mm截面	0.6~0.9	0.6~0.9	0.05~0.15	0.6~0.8
吸水率(24 hours) Water absorption, 24 hrs @ 23°C	D570	%	-	-	0.2	-		
機械性質	衝擊強度 Impact Strength	D256	J/m	3.18mm截面(缺口) Notched Izod	27	27	43	43
				3.18mm截面(無缺口) Unnotched Izod	374	374	427	427
	伸張強度 Tensile Strength	D638	MPa	83	83	172	103	
	延伸率 Tensile Elongation	D638	%	2~4	2~4	1.7	6~10	
	伸張模數 Tensile Modulus	D638	MPa	3448	3448	17225	3792	
	彈性強度 Flexural Strength	D790	MPa	138	138	262	138	
	彈性模數 Flexural Modulus	D790	MPa	3448	3448	14469	3448	
洛氏硬度 Rockwell Hardness	D785	-	-	-	-	-		
熱性質	熱變形溫度 DTUL	D648	°C	at 264 psi ( 1.82 MPa)	-	-	204	-
				at 66 psi (0.455 MPa)	-	-	-	-
	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	-	-	-	-	-	-		
電氣性質	體積固有電阻 Volume Resistivity	D257	ohm-cm	<1e5	1e1~1e3	10e2~10e4	<10	
	表面電阻 Surface Resistivity	D257	ohm/SQ	<1e10	1e4~1e6	max10e6	<1e4	
	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.