



# PEEK\* 系列複合材料物性表

## compound datasheets

項目 Property		試驗法 ASTM Method	單位 Units	PEEK*, CNT	PEEK*, GF30, PTFE15	PEEK*, CF30, PTFE15	PEEK*, CF, PTFE, Graphite	
一般性質	比重 Specific Gravity	D792	-	1.33	1.63	1.5	1.44	
	成型收縮率 Mold Shrinkage	6.35mm截面	D955	%	-	-	-	
		3.18mm截面			1.8~2.2	0.2~0.5	0.01~0.1	0.1~0.3
吸水率(24 hours) Water absorption, 24 hrs @ 23°C	D570	%	0.15	-	-	-		
機械性質	衝擊強度 Impact Strength	3.18mm截面(缺口) Notched Izod	D256	J/m	21	107	80	107
		3.18mm截面(無缺口) Unnotched Izod			427	828	641	561
	伸張強度 Tensile Strength	D638	MPa	93	155	228	155	
	延伸率 Tensile Elongation	D638	%	2~4	1.5~3	1~2	2~3	
	伸張模數 Tensile Modulus	D638	MPa	4826	12756	27580	13790	
	彈性強度 Flexural Strength	D790	MPa	159	241	345	234	
	彈性模數 Flexural Modulus	D790	MPa	4137	11377	25512	11032	
洛氏硬度 Rockwell Hardness	D785	-	-	-	-	-		
熱性質	熱變形溫度 DTUL	at 264 psi ( 1.82 MPa)	D648	°C	157	>288	>288	>288
		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	-	-	-	**V-0 @ 1.5 mm	**V-0 @ 1.5 mm	**V-0 @ 1.5 mm		
電氣性質	體積固有電阻 Volume Resistivity	D257	ohm-cm	1e1~1e3	<1e16	1e4~1e5	1e4~1e5	
	表面電阻 Surface Resistivity	D257	ohm/SQ	1e4~1e7	-	-	-	
	靜電消散(MIL-PRF-81705C) Static Decay	FTMS-4046.1	sec	-	-	-	-	

\*PEEK為 PolyEtherEtherKetone(聚醚醚酮)根據ISO1043標準之縮寫 \*\*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.