



# PSU 系列複合材料物性表

## compound datasheets

項目 Property		試驗法 ASTM Method	單位 Units	PSU	PSU, SSF10	PSU, PTFE10	PSU, PTFE15	PSU, GF10	PSU, GF20	PSU FR, GF30	
一般性質	比重 Specific Gravity	D792	-	1.24	1.35	1.28	1.32	1.3	1.38	1.46	
	成型收縮率 Mold Shrinkage	D955	%	6.35mm截面	-	-	-	-	-	-	
				3.18mm截面	0.7	0.5~0.7	0.8	0.8	0.5	0.2~0.4	0.1~0.3
吸水率(24 hours) Water absorption, 24 hrs @ 23°C	D570	%	0.22	-	-	-	-	-	-	0.2	
機械性質	衝擊強度 Impact Strength	D256	J/m	3.18mm截面(缺口) Notched Izod	96	53	64	80	64	59	69
				3.18mm截面(無缺口) Unnotched Izod	2403	534	1068	801	694	587	454
	伸張強度 Tensile Strength	D638	MPa	72	69	62	59	83	100	110	
	延伸率 Tensile Elongation	D638	%	>10	>10	5~7	4~7	5	2.5~4	2~3	
	伸張模數 Tensile Modulus	D638	MPa	2551	2758	2275	2551	3448	5861	8274	
	彈性強度 Flexural Strength	D790	MPa	103	97	90	83	131	145	162	
	彈性模數 Flexural Modulus	D790	MPa	2689	2620	2413	2413	3448	5516	7584	
洛氏硬度 Rockwell Hardness	D785	-	120 R	-	-	-	122 R	-	-		
熱性質	熱變形溫度 DTUL	D648	°C	at 264 psi ( 1.82 MPa)	174	-	174	174	177	177	185
				at 66 psi (0.455 MPa)	181	-	-	-	182	-	-
	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	5.6	-	-	-	3.8	-	-	
防火等級 Flammability thickness	-	-	-	*V-1 @ 1.5 mm	-	*V-1 @ 1.5 mm	*V-1 @ 1.5 mm	-	*V-1 @ 1.5 mm	V-0 @ 3 mm	
電氣性質	體積固有電阻 Volume Resistivity	D257	ohm-cm	>1e15	<1e2	-	-	>1e12	1e14~1e16	-	
	表面電阻 Surface Resistivity	D257	ohm/SQ	-	<1e5	-	-	-	-	-	
	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.