



PP 系列複合材料物性表

compound datasheets

項目 Property		試驗法 ASTM Method	單位 Units	PP, GF10, CC	PP, GF20, CC	PP, GF30, CC	PP Hi, GF10, CC	PP Hi, GF20, CC	PP Hi, GF30, CC	PP FR, GF10	PP FR, GF20	
一般性質	比重 Specific Gravity	D792	-	0.97	1.03	1.12	0.97	1.03	1.12	0.97	1.03	
	成型收縮率 Mold Shrinkage	6.35mm截面	D955	%	-	-	-	-	-	-	-	
		3.18mm截面			0.4~0.8	0.2~0.5	0.1~0.4	0.4~0.8	0.2~0.5	0.1~0.4	0.4~0.8	0.2~0.5
吸水率(24 hours) Water absorption, 24 hrs @ 23°C	D570	%	-	-	-	-	-	-	-	0.01	0.01	
機械性質	衝擊強度 Impact Strength	3.18mm截面(缺口) Notched Izod	D256	J/m	80	91	107	133	214	267	37	48
		3.18mm截面(無缺口) Unnotched Izod			534	587	641	587	694	801	481	320
	伸張強度 Tensile Strength	D638	MPa	46	60	76	34	41	52	39	47	
	延伸率 Tensile Elongation	D638	%	7~8	4.5~5.5	4~5	8~10	7~9	6~7	7.5~8.5	3~4	
	伸張模數 Tensile Modulus	D638	MPa	3103	4482	6206	2413	3792	5516	2965	4482	
	彈性強度 Flexural Strength	D790	MPa	66	90	112	52	59	83	56	72	
	彈性模數 Flexural Modulus	D790	MPa	2413	3448	4826	2068	2758	3792	2068	3448	
洛氏硬度 Rockwell Hardness	D785	-	-	-	-	-	-	-	-	-	-	
熱性質	熱變形溫度 DTUL	at 264 psi (1.82 MPa)	D648	°C	113	129	141	-	-	-	129	141
		at 66 psi (0.455 MPa)			149	152	157	-	-	-	132	152
	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	*HB @ 1.5 mm	*HB @ 1.5 mm	*HB @ 1.5 mm	*HB @ 1.5 mm	*HB @ 1.5 mm	HB @ 1.5 mm	HB @ 1.5 mm	
電氣性質	體積固有電阻 Volume Resistivity	D257	ohm-cm	-	-	-	-	-	-	>1e15	>1e15	
	表面電阻 Surface Resistivity	D257	ohm/SQ	-	-	-	-	-	-	-	-	
	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.