



PPA 系列複合材料物性表

compound datasheets

項目 Property		試驗法 ASTM Method	單位 Units	PPA, GF10	PPA, GF20	PPA, GF30	PPA, GF40	PPA, GF33 HS	PPA FR, GF33 HS	PPA, CF10	PPA, CF20	
一般性質	比重 Specific Gravity	D792	-	1.27	1.35	1.44	1.55	1.46	1.75	1.24	1.28	
	成型收縮率 Mold Shrinkage	6.35mm截面	D955	%	-	-	-	-	-	-	-	-
		3.18mm截面			0.6	0.4	0.2~0.4	0.2~0.3	0.2~0.4	0.15~0.3	0.1~0.4	0.05~0.2
吸水率(24 hours) Water absorption, 24 hrs @ 23°C	D570	%	0.28	0.24	-	0.18	0.2	0.16	-	-		
機械性質	衝擊強度 Impact Strength	3.18mm截面(缺口) Notched Izod	D256	J/m	27	59	80	107	96	80	32	53
		3.18mm截面(無缺口) Unnotched Izod			267	534	667	641	694	534	294	534
	伸張強度 Tensile Strength	D638	MPa	93	124	193	221	207	152	152	241	
	延伸率 Tensile Elongation	D638	%	1.6	1.9	1.5~3	2~3	2~3.5	1.5	1~2	1~2	
	伸張模數 Tensile Modulus	D638	MPa	6895	7584	11377	14824	12066	14480	11032	18616	
	彈性強度 Flexural Strength	D790	MPa	141	181	269	317	283	207	214	345	
	彈性模數 Flexural Modulus	D790	MPa	5516	6895	10342	13445	11722	13790	8274	15169	
洛氏硬度 Rockwell Hardness	D785	-	125 R	125 R	-	125 R	125 R	-	-	-		
熱性質	熱變形溫度 DTUL	at 264 psi (1.82 MPa)	D648	°C	216	249	>260	279	277	266	249	277
		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 ⁻⁵ /°C	3.8	3.2	-	1.8	1.8	-	-	-	
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	*V-0 @ 0.8 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	>1e14	>1e15	>1e15	>1e15	-	<1e6	
	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.