



mPPO 系列複合材料物性表

compound datasheets

項目 Property		試驗法 ASTM Method	單位 Units	MPPE, CB	MPPO, CF	MPPO, PTFE15	MPPO FR, PTFE10	MPPO FR, GF20	MPPO FR, GF30	
一般性質	比重 Specific Gravity	D792	-	1.17	1.21	1.15	1.15	1.25	1.33	
	成型收縮率 Mold Shrinkage	6.35mm截面	D955	%	-	-	-	-	-	
		3.18mm截面			0.6~0.8	0.15~0.25	0.5~1	0.7~1	0.2~0.3	0.15~0.25
吸水率(24 hours) Water absorption, 24 hrs @ 23°C	D570	%	-	-	-	0.06	0.08	0.07		
機械性質	衝擊強度 Impact Strength	3.18mm截面(缺口) Notched Izod	D256	J/m	32	53	117	80	80	69
		3.18mm截面(無缺口) Unnotched Izod			267	267	801	1602	427	320
	伸張強度 Tensile Strength	D638	MPa	56	90	45	41	76	83	
	延伸率 Tensile Elongation	D638	%	2~3	1.5~2.5	>10	>10	2	1~2	
	伸張模數 Tensile Modulus	D638	MPa	3790	7579	2413	1931	6550	8619	
	彈性強度 Flexural Strength	D790	MPa	88	138	79	76	110	117	
	彈性模數 Flexural Modulus	D790	MPa	3583	6890	2413	2068	5861	7584	
洛氏硬度 Rockwell Hardness	D785	-	-	-	-	-	-	-		
熱性質	熱變形溫度 DTUL	at 264 psi (1.82 MPa)	D648	°C	-	154	116	-	-	-
		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	-	-	-	-	-	-	
防火等級 Flammability thickness	-	-	-	-	*HB @ 1.5 mm	*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	max10e5	10e2~10e4	-	-	-	-	
	表面電阻 Surface Resistivity	D257	ohm/SQ	max10E6	10e5~10e6	-	-	-	-	
	靜電消散(MIL-PRF-81705C) Static Decay	FTMS-4046.1	sec	<2	-	-	-	-	-	

* 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.