



# Nylon 6/6 系列複合材料物性表

## compound datasheets

項目 Property		試驗法 ASTM Method	單位 Units	Nylon 6/6, GF20	Nylon 6/6, GF30	Nylon 6/6, GF40	Nylon 6/6, GF50	Nylon 6/6 FR, GF10	Nylon 6/6 FR, GF20	Nylon 6/6 FR, GF30	Nylon 6/6, CF10	
一般性質	比重 Specific Gravity	D792	-	1.27	1.36	1.46	1.56	1.48	1.58	1.66	1.18	
	成型收縮率 Mold Shrinkage	6.35mm截面	D955	%	-	-	-	-	-	-	-	
		3.18mm截面			0.3~0.6	0.2~0.4	0.1~0.4	0.1~0.3	0.4~0.6	0.2~0.35	0.15~0.3	0.2~0.4
吸水率(24 hours) Water absorption, 24 hrs @ 23°C	D570	%	-	-	-	-	0.8	0.7	0.6	-		
機械性質	衝擊強度 Impact Strength	3.18mm截面(缺口) Notched Izod	D256	J/m	53	80	123	128	53	75	107	43
		3.18mm截面(無缺口) Unnotched Izod			481	801	1121	1228	427	641	854	427
	伸張強度 Tensile Strength	D638	MPa	131	159	186	207	90	128	145	145	
	延伸率 Tensile Elongation	D638	%	2.5~3.5	2.5~3.5	2.5~3.5	2~3	3~4	2~3	2~3	2~3	
	伸張模數 Tensile Modulus	D638	MPa	6895	9308	13100	15858	5516	8274	11377	8964	
	彈性強度 Flexural Strength	D790	MPa	207	255	296	317	138	207	228	214	
	彈性模數 Flexural Modulus	D790	MPa	6206	8619	11584	14480	4826	7584	10687	6895	
洛氏硬度 Rockwell Hardness	D785	-	-	-	-	-	115 R	116 R	118 R	-		
熱性質	熱變形溫度 DTUL	at 264 psi ( 1.82 MPa)	D648	°C	243	249	249	249	204	227	232	-
		at 66 psi (0.455 MPa)			-	-	-	-	216	246	249	-
	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	-	-	*HB @ 1.5 mm	*HB @ 1.5 mm	*HB @ 1.5 mm	*HB @ 1.5 mm	V-0 @ 0.8 mm	V-0 @ 0.8 mm	V-0 @ 0.5 mm	*HB @ 1.5 mm		
電氣性質	體積固有電阻 Volume Resistivity	D257	ohm-cm	-	-	-	-	>1e15	>1e14	>1e14	<1e5	
	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.