



Nylon 6/6 Hi 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 Hi, GF10	Nylon 6/6 Hi, GF20	Nylon 6/6 Hi, GF30	Nylon 6/6 Hi, GF40	Nylon 6/6 Hi FR	Nylon 6/6 Hi FR, GF30	Nylon 6/6 Hi, CF20	Nylon 6/6 Hi, CF30	
一般性質	比重 Specific Gravity	D792	-	1.16	1.22	1.32	1.32	1.26	1.59	1.17	1.21	
	成型收縮率 Mold Shrinkage	6.35mm截面	D955	%	-	-	-	-	-	-	-	
		3.18mm截面			0.6~1	0.3~0.6	0.2~0.4	0.2~0.4	1.8~2.4	0.2~0.3	0.1~0.3	0.1~0.2
吸水率(24 hours) Water absorption, 24 hrs @ 23°C	D570	%	-	-	-	-	0.8	0.6	-	-		
機械性質	衝擊強度 Impact Strength	3.18mm截面(缺口) Notched Izod	D256	J/m	160	187	198	176	320	133	171	198
		3.18mm截面(無缺口) Unnotched Izod			854	1014	1121	1068	No Break	801	908	972
	伸張強度 Tensile Strength	D638	MPa	72	103	131	152	45	110	152	176	
	延伸率 Tensile Elongation	D638	%	8~9	4~6	3~5	3~4	>10	2~3	3~5	2~3	
	伸張模數 Tensile Modulus	D638	MPa	3448	5516	7584	10342	1931	10342	13100	18272	
	彈性強度 Flexural Strength	D790	MPa	103	155	207	231	76	172	234	276	
	彈性模數 Flexural Modulus	D790	MPa	2758	4826	6895	9653	2068	8964	10342	14480	
洛氏硬度 Rockwell Hardness	D785	-	-	-	-	-	112 R	114 R	-	-		
熱性質	熱變形溫度 DTUL	at 264 psi (1.82 MPa)	D648	°C	-	-	243	246	71	232	232	-
		at 66 psi (0.455 MPa)			-	-	-	-	191	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 ⁻⁵ /°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 @ 1.5 mm	V-0 @ 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	-	-	-	-	>1e16	>1e14	>1e14	-	
	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.