



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, CB	Nylon 6/6 Hi, CB, GF15	Nylon 6/6 Hi, SSF10	Nylon 6/6 Hi, MoS ₂ 4	Nylon 6/6 Hi, PTFE20	
一般性質	比重 Specific Gravity	D792	-	1.17	1.27	1.18	1.11	1.21	
	成型收縮率 Mold Shrinkage	D955	%	6.35mm截面	-	-	-	-	
				3.18mm截面	-	0.6~0.9	1.7~2.4	1.5~2.5	2~3.5
吸水率(24 hours) Water absorption, 24 hrs @ 23°C	D570	%	-	-	-	-	-		
機械性質	衝擊強度 Impact Strength	D256	J/m	3.18mm截面(缺口) Notched Izod	64	80	160	267	149
				3.18mm截面(無缺口) Unnotched Izod	641	641	1068	No Break	1175
	伸張強度 Tensile Strength	D638	MPa	52	83	55	48	41	
	延伸率 Tensile Elongation	D638	%	3~6	2~4	>10	>10	>10	
	伸張模數 Tensile Modulus	D638	MPa	2758	4826	2413	2620	1724	
	彈性強度 Flexural Strength	D790	MPa	83	124	76	62	59	
	彈性模數 Flexural Modulus	D790	MPa	2620	4137	2413	2068	1724	
洛氏硬度 Rockwell Hardness	D785	-	-	-	-	-	-		
熱性質	熱變形溫度 DTUL	D648	°C	at 264 psi (1.82 MPa)	-	-	-	71	82
				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	*HB @ 1.5 mm		
電氣性質	體積固有電阻 Volume Resistivity	D257	ohm-cm	<1e3	<1e3	<10	-	1e14~1e16	
	表面電阻 Surface Resistivity	D257	ohm/SQ	<1e6	<1e6	1e4~1e6	-	-	
	靜電消散(MIL-PRF-81705C) Static Decay	FTMS-4046.1	sec	<2	<2	<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.