



Nylon 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, GF20	Nylon 6, GF30	Nylon 6, GF40	Nylon 6, GF50	Nylon 6, CF20	Nylon 6, CF30	
一般性質	比重 Specific Gravity	D792	-	1.27	1.35	1.45	1.56	1.22	1.27	
	成型收縮率 Mold Shrinkage	6.35mm截面 3.18mm截面	D955	%	-	-	-	-	-	
					0.2~0.4	0.2~0.4	0.1~0.3	0.1~0.3	0.02~0.1	0.02~0.1
吸水率(24 hours) Water absorption, 24 hrs @ 23°C	D570	%	-	-	-	-	-	-		
機械性質	衝擊強度 Impact Strength	3.18mm截面(缺口) Notched Izod	D256	J/m	64	107	133	144	69	107
		3.18mm截面(無缺口) Unnotched Izod			641	1014	1175	1228	747	908
	伸張強度 Tensile Strength	D638	MPa	131	159	172	190	172	221	
	延伸率 Tensile Elongation	D638	%	3~4	3~4	2.5~3.5	2~3	2~3	2~3	
	伸張模數 Tensile Modulus	D638	MPa	6895	9308	11722	15858	14480	22064	
	彈性強度 Flexural Strength	D790	MPa	193	234	269	310	262	331	
	彈性模數 Flexural Modulus	D790	MPa	6206	8274	10342	14480	11032	17238	
洛氏硬度 Rockwell Hardness	D785	-	-	-	-	-	-	-		
熱性質	熱變形溫度 DTUL	at 264 psi (1.82 MPa)	D648	°C	-	-	-	-	-	-
		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	*HB @ 1.5 mm	*HB @ 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	-	-	-	-	<1e3	<1e2	
	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.