



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, AR15, PTFE15	Nylon 6/6, GF30, PTFE15	Nylon 6/6 FR, GF20, PTFE20	Nylon 6/6, GF30, PTFE13, Si2	Nylon 6/6, CF30, PTFE13, Si2	Nylon 6/6, CF30, PTFE15	
一般性質	比重 Specific Gravity	D792	-	1.28	1.49	1.43	1.49	1.35	1.37	
	成型收縮率 Mold Shrinkage	6.35mm截面	D955	%	-	-	-	-	-	
		3.18mm截面			1~1.5	0.1~0.5	0.4~0.6	0.2~0.3	0.1	0.1
吸水率(24 hours) Water absorption, 24 hrs @ 23°C	D570	%	-	-	0.7	0.5	0.7	-		
機械性質	衝擊強度 Impact Strength	3.18mm截面(缺口) Notched Izod	D256	J/m	53	91	80	107	101	91
		3.18mm截面(無缺口) Unnotched Izod			481	881	694	1068	748	801
	伸張強度 Tensile Strength	D638	MPa	83	147	117	158	200	207	
	延伸率 Tensile Elongation	D638	%	5~6	2.5~4	2.5~3.5	3	1~2	1.5~3	
	伸張模數 Tensile Modulus	D638	MPa	4134	9308	6895	10335	20670	20670	
	彈性強度 Flexural Strength	D790	MPa	117	224	179	227	310	317	
	彈性模數 Flexural Modulus	D790	MPa	3790	8964	6206	8957	17225	18603	
洛氏硬度 Rockwell Hardness	D785	-	-	-	118 R	-	-	-		
熱性質	熱變形溫度 DTUL	at 264 psi (1.82 MPa)	D648	°C	-	238	232	238	249	254
		at 66 psi (0.455 MPa)			-	-	238	-	-	-
	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	10e14	>1e13	>1e14	10e15	10e1	10e1	
	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.