



# 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, MoS <sub>2</sub> 2	Nylon 6/6, MoS <sub>2</sub> 4	Nylon 6/6, MoS <sub>2</sub> 5	Nylon 6/6, PTFE5	Nylon 6/6, PTFE10	Nylon 6/6, PTFE20	Nylon 6/6, PTFE18, Si2	Nylon 6/6 FR, PTFE18, Si2	
一般性質	比重 Specific Gravity	D792	-	1.16	1.18	1.18	1.17	1.19	1.26	1.24	1.24	
	成型收縮率 Mold Shrinkage	6.35mm截面	D955	%	-	-	-	-	-	-	-	
		3.18mm截面			1~2	1~1.4	1~1.5	1.5~3	1.5~2.5	1.5~2.5	1.5~3	2.8~3.5
吸水率(24 hours) Water absorption, 24 hrs @ 23°C		D570	%	-	0.9	-	-	-	-	-	0.9	
機械性質	衝擊強度 Impact Strength	3.18mm截面(缺口) Notched Izod	D256	J/m	48	43	43	53	64	53	64	96
		3.18mm截面(無缺口) Unnotched Izod			587	1175	1175	908	747	561	No Break	1281
	伸張強度 Tensile Strength		D638	MPa	86	83	86	-	72	66	66	62
	延伸率 Tensile Elongation		D638	%	3~8	4~6	5~8	>10	>10	>6	>10	>10
	伸張模數 Tensile Modulus		D638	MPa	3448	4137	3792	3103	3103	2896	2758	2620
	彈性強度 Flexural Strength		D790	MPa	131	131	128	107	110	97	97	97
	彈性模數 Flexural Modulus		D790	MPa	3448	3448	3792	2896	3103	2758	2758	2758
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	93	99	99	85	79	85	85	71
		at 66 psi (0.455 MPa)			-	232	-	-	-	-	-	-
	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	*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	1e14~1e16	>1e15	1e14~1e16	1e14~1e16	1e14~1e16	1e14~1e16	1e14~1e16	>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.