



Nylon 11 系列複合材料物性表

compound datasheets

項目 Property		試驗法 ASTM Method	單位 Units	Nylon 11	Nylon 11, MoS ₂	Nylon 11, PTFE10	Nylon 11, GF20, PTFE20	Nylon 11, GF10	Nylon 11, GF20	Nylon 11, GF30	Nylon 11, GF40	
一般性質	比重 Specific Gravity	D792	-	1.03	1.07	1.09	1.33	1.1	1.18	1.25	1.35	
	成型收縮率 Mold Shrinkage	6.35mm截面	D955	%	-	-	-	-	-	-	-	
		3.18mm截面			1.3~1.8	1.5~2	1.5~2.5	0.2~0.4	0.4~0.6	0.2~0.4	0.1~0.3	0.1~0.3
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	96	59	69	91	59	107	107	93
		3.18mm截面(無缺口) Unnotched Izod			No Break	1495	No Break	481	587	614	587	427
	伸張強度 Tensile Strength	D638	MPa	40	45	34	72	62	83	86	86	
	延伸率 Tensile Elongation	D638	%	>10	>10	>10	2~3	7~8	3~4	2.5~3.5	2~3	
	伸張模數 Tensile Modulus	D638	MPa	1379	1724	1379	5171	2758	4826	6550	8274	
	彈性強度 Flexural Strength	D790	MPa	52	55	52	107	83	117	124	124	
	彈性模數 Flexural Modulus	D790	MPa	1379	1517	1379	4482	2413	4826	5516	6895	
洛氏硬度 Rockwell Hardness	D785	-	108 R	-	-	-	108 R	-	-	-		
熱性質	熱變形溫度 DTUL	at 264 psi (1.82 MPa)	D648	°C	54	54	54	163	-	-	-	-
		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	*HB @ 1.5 mm	*HB @ 1.5 mm	
電氣性質	體積固有電阻 Volume Resistivity	D257	ohm-cm	-	-	-	-	-	-	-	-	
	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.