

UNITIKA NYLON6

Type : Flame retardant nylon

Property	Standard	Unit	A 1 0 2 5 G O	
			Dry	Cond.

Mechanical properties

Tensile stress at yield	ISO 527-1 527-2	MPa		
Tensile stress at break			148	110
Tensile modulus		MPa	10800	7000
Tensile strain at yield		%		
Tensile strain at break			2.0	2.5
Flexural strength	ISO 178	MPa	250	140
Flexural modulus		MPa	9200	6000
Charpy impact strength	ISO 179-1	kJ/m ²	22	31
Charpy notched impact strength			9	14
Rockwell Hardness (R Scale)	ISO 2039		118	102

Thermal properties

Coefficient of linear thermal expansion	ISO 11359-2	10 ⁻⁵ /	3.0	
Deflection Temperature under load 1.8MPa	ISO 75-1 75-2		200	
Deflection Temperature under load 0.45MPa			215	

Electrical properties

Volume resistivity	IEC 60093	-m		
Electric strength Thickness : 1mm	IEC 60243-1	MV/m	25	
Dielectric constant 10 ⁶ Hz	IEC 60250		3.8	
Dissipation factor 10 ⁶ Hz	IEC 60250		0.020	
Comparative tracking Index	IEC 60112			

Other properties

Density	ISO 1183	g/cm ³	1.64	
Water absorption 23 in water 24h 23 /50%RH equilibrium	ISO 62	%	1.0	
Mold shrinkage flow (Thickness : 3.2mm) transverse		%	0.2	0.7
Flammability	UL-94		0.87mmt V-0	

Dry : dry-as-mold condition

Cond. : conditioned to equilibrium at 23 50%RH

The data listed here are typical of average lots and not guaranteed values .