

UNITIKA NYLON6

Type : Flame retardant nylon

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

Mechanical properties

Tensile stress at yield	ISO 527-1 527-2	MPa		
Tensile stress at break			77	41
Tensile modulus		MPa	3100	1800
Tensile strain at yield		%		
Tensile strain at break			3.4	4.0
Flexural strength	ISO 178	MPa	110	60
Flexural modulus		MPa	3000	1500
Charpy impact strength	ISO 179-1	kJ/m ²	35	51
Charpy notched impact strength			3	10
Rockwell Hardness (R Scale)	ISO 2039		116	97

Thermal properties

Coefficient of linear thermal expansion	ISO 11359-2	10 ⁻⁵ /	10.0	
Deflection Temperature under load 1.8MPa	ISO 75-1 75-2		66	
Deflection Temperature under load 0.45MPa			170	

Electrical properties

Volume resistivity	IEC 60093	-m	1 × 10 ¹⁴	
Electric strength Thickness: 1mm	IEC 60243-1	MV/m	25	
Dielectric constant 10 ⁶ Hz	IEC 60250		3.0	
Dissipation factor 10 ⁶ Hz	IEC 60250		0.010	
Comparative tracking Index	IEC 60112			

Other properties

Density	ISO 1183	g/cm ³	1.34	
Water absorption 23 in water 24h 23 /50%RH equilibrium	ISO 62	%	1.2	
			1.9	
Mold shrinkage flow (Thickness : 3.2mm) transverse		%	1.1	
			1.5	
Flammability	UL-94		0.84mmt 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 .