

UNITIKA NYLON66

Type : Standard nylon

Property	Standard	Unit	A 1 2 5	
			Dry	Cond.

Mechanical properties

Tensile stress at yield	ISO 527-1 527-2	MPa	82	60
Tensile stress at break				
Tensile modulus		MPa	3000	1000
Tensile strain at yield		%		
Tensile strain at break			30	100<
Flexural strength	ISO 178	MPa	113	43
Flexural modulus		MPa	3000	1100
Charpy impact strength	ISO 179-1	kJ/m ²	NB	NB
Charpy notched impact strength			5	15
Rockwell Hardness (R Scale)	ISO 2039		120	108

Thermal properties

Coefficient of linear thermal expansion	ISO 11359-2	10 ⁻⁵ /	9.0	
Deflection Temperature under load 1.8MPa	ISO 75-1 75-2		70	
Deflection Temperature under load 0.45MPa		195		

Electrical properties

Volume resistivity	IEC 60093	-m	10 ¹²	
Electric strength Thickness: 1mm	IEC 60243-1	MV/m	32	
Dielectric constant 10 ⁶ Hz	IEC 60250		3.4	
Dissipation factor 10 ⁶ Hz	IEC 60250		0.04	
Comparative tracking Index	IEC 60112		600	

Other properties

Density	ISO 1183	g/cm ³	1.14	
Water absorption 23 /50%RH equilibrium	ISO 62	%	2.3	
Mold shrinkage flow (Thickness: 3.2mm) transverse		%	1.6	2.2
Flammability	UL-94		0.81mmt V-2	

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 .