

UNITIKA NYLON66

Type : Glass-fiber 50% reinforced nylon

Property	Standard	Unit	B 2 0 4 0 G 5 0	
			Dry	Cond.

Mechanical properties

Tensile stress at yield	ISO 527-1 527-2	MPa		
Tensile stress at break			220	165
Tensile modulus		MPa	16700	11200
Tensile strain at yield		%		
Tensile strain at break			2.5	3.0
Flexural strength	ISO 178	MPa	360	230
Flexural modulus		MPa	13500	10300
Charpy impact strength	ISO 179-1	kJ/m ²	95	102
Charpy notched impact strength			16	20
Rockwell Hardness (R Scale)	ISO 2039		120	

Thermal properties

Coefficient of linear thermal expansion	ISO 11359-2	10 ⁻⁵ /	2.0	
Deflection Temperature under load 1.8MPa	ISO 75-1 75-2		233	
Deflection Temperature under load 0.45MPa			252	

Electrical properties

Volume resistivity	IEC 60093	-m	10 ¹²	
Electric strength Thickness: 1mm	IEC 60243-1	MV/m	35	
Dielectric constant 10 ⁶ Hz	IEC 60250		3.3	
Dissipation factor 10 ⁶ Hz	IEC 60250		0.02	
Comparative tracking Index	IEC 60112		600	

Other properties

Density	ISO 1183	g/cm ³	1.57	
Water absorption 23 /50%RH equilibrium	ISO 62	%	1.4	
Mold shrinkage flow (Thickness: 3.2mm) transverse		%	0.2	0.6
Flammability	UL-94			

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 .