

UNITIKA NYLON6

Type : Glass-fiber 60% reinforced nylon

Property	Standard	Unit	A 1 0 2 2 G F L 6 0 (A)	
			Dry	Cond.

Mechanical properties

Tensile stress at yield	ISO 527-1 527-2	MPa		
Tensile stress at break			240	170
Tensile modulus		MPa	17500	10800
Tensile strain at yield		%		
Tensile strain at break			2.6	4.4
Flexural strength	ISO 178	MPa	380	265
Flexural modulus		MPa	16800	10300
Charpy impact strength	ISO 179-1	kJ/m ²	80	93
Charpy notched impact strength			19	26
Rockwell Hardness (R Scale)	ISO 2039			

Thermal properties

Coefficient of linear thermal expansion	ISO 11359-2	10 ⁻⁵ /	2.2	
Deflection Temperature under load 1.8MPa	ISO 75-1 75-2		214	
Deflection Temperature under load 0.45MPa			218	

Electrical properties

Volume resistivity	IEC 60093	-m	2 × 10 ¹³	
Electric strength Thickness: 1mm	IEC 60243-1	MV/m	42	
Dielectric constant 10 ⁶ Hz	IEC 60250			
Dissipation factor 10 ⁶ Hz	IEC 60250			
Comparative tracking Index	IEC 60112			

Other properties

Density	ISO 1183	g/cm ³	1.70	
Water absorption 23 in water 24h 23 /50%RH equilibrium	ISO 62	%	0.7 1.1	
Mold shrinkage flow (Thickness: 3.2mm) transverse		%	0.1 0.3	
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 .