

UNITIKA NYLON6

Type : Glass-fiber 15% reinforced nylon

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

Mechanical properties

Tensile stress at yield	ISO 527-1 527-2	MPa		
Tensile stress at break			120	70
Tensile modulus		MPa	5600	3000
Tensile strain at yield		%		
Tensile strain at break			2.7	4.6
Flexural strength	ISO 178	MPa	175	100
Flexural modulus		MPa	5000	2800
Charpy impact strength	ISO 179-1	kJ/m ²	23	33
Charpy notched impact strength			7	14
Rockwell Hardness (R Scale)	ISO 2039		116	103

Thermal properties

Coefficient of linear thermal expansion	ISO 11359-2	10 ^{-5/}	4.2	
Deflection Temperature under load 1.8MPa	ISO 75-1 75-2		190	
Deflection Temperature under load 0.45MPa			214	

Electrical properties

Volume resistivity	IEC 60093	-m	2 × 10 ¹³	8 × 10 ¹¹
Electric strength Thickness: 1mm	IEC 60243-1	MV/m	39	36
Dielectric constant 10 ⁶ Hz	IEC 60250		3.3	
Dissipation factor 10 ⁶ Hz	IEC 60250			
Comparative tracking Index	IEC 60112			

Other properties

Density	ISO 1183	g/cm ³	1.23	
Water absorption 23 in water 24h 23 /50%RH equilibrium	ISO 62	%	1.5 2.4	
Mold shrinkage flow (Thickness: 3.2mm) transverse		%	0.3 ~ 0.5 0.8 ~ 1.0	
Flammability	UL-94		0.86mmt HB	

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 .