

UNITIKA NYLON6

Type : High modulus and low warpage nylon

Property	Standard	Unit	RUN35 - C 25	
			Dry	Cond.

Mechanical properties

Tensile stress at yield	ISO 527-1 527-2	MPa		
Tensile stress at break			164	129
Tensile modulus		MPa	17500	13000
Tensile strain at yield		%		
Tensile strain at break			1.3	1.7
Flexural strength	ISO 178	MPa	240	200
Flexural modulus		MPa	15000	12000
Charpy impact strength	ISO 179-1	kJ/m ²	35	40
Charpy notched impact strength			5	6
Rockwell Hardness (R Scale)	ISO 2039			

Thermal properties

Coefficient of linear thermal expansion	ISO 11359-2	10 ⁻⁵ /	1.5	
Deflection Temperature under load 1.8MPa	ISO 75-1 75-2		191	
Deflection Temperature under load 0.45MPa		194		

Electrical properties

Volume resistivity	IEC 60093	-m		
Electric strength Thickness: 1mm	IEC 60243-1	MV/m		
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	1.66	
Water absorption 23 in water 24h 23 /50%RH equilibrium	ISO 62	%	1.0	
Mold shrinkage flow (Thickness : 3.2mm) transverse		%	0.1	0.5
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 .