

UNITIKA NYLON66

Type : High-impact nylon

Property	Standard	Unit	ET 2025	
			Dry	Cond.

Mechanical properties

Tensile stress at yield	ISO 527-1 527-2	MPa	45	38
Tensile stress at break				
Tensile modulus		MPa	1800	800
Tensile strain at yield		%		
Tensile strain at break			60	200<
Flexural strength	ISO 178	MPa	55	25
Flexural modulus		MPa	1700	800
Charpy impact strength	ISO 179-1	kJ/m ²	NB	NB
Charpy notched impact strength			80	90
Rockwell Hardness (R Scale)	ISO 2039			

Thermal properties

Coefficient of linear thermal expansion	ISO 11359-2	10 ⁻⁵ /	10.0	
Deflection Temperature under load 1.8MPa	ISO 75-1 75-2		62	
Deflection Temperature under load 0.45MPa			161	

Electrical properties

Volume resistivity	IEC 60093	-m	10 ¹³	
Electric strength Thickness: 1mm	IEC 60243-1	MV/m	31	
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	1.07	
Water absorption 23 /50%RH equilibrium	ISO 62	%	1.7	
Mold shrinkage flow (Thickness: 3.2mm) transverse		%	2.2	2.4
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 .