

UNITIKA NYLON6

Type : High-impact nylon

Property	Standard	Unit	EX - 1030	
			Dry	Cond.

Mechanical properties

Tensile stress at yield	ISO 527-1 527-2	MPa	39	28
Tensile stress at break				
Tensile modulus		MPa	1500	600
Tensile strain at yield		%	5.0	
Tensile strain at break			200<	200<
Flexural strength	ISO 178	MPa	53	21
Flexural modulus		MPa	1500	600
Charpy impact strength	ISO 179-1	kJ/m ²	NB	NB
Charpy notched impact strength			91	NB
Rockwell Hardness (R Scale)	ISO 2039		93	65

Thermal properties

Coefficient of linear thermal expansion	ISO 11359-2	10 ⁻⁵ /	12.0	
Deflection Temperature under load 1.8MPa	ISO 75-1 75-2		47	
Deflection Temperature under load 0.45MPa			82	

Electrical properties

Volume resistivity	IEC 60093	-m	3 × 10 ¹³	3 × 10 ¹²
Electric strength Thickness: 1mm	IEC 60243-1	MV/m	42	
Dielectric constant 10 ⁶ Hz	IEC 60250		2.9	
Dissipation factor 10 ⁶ Hz	IEC 60250		0.020	
Comparative tracking Index	IEC 60112			

Other properties

Density	ISO 1183	g/cm ³	1.04	
Water absorption 23 in water 24h 23 /50%RH equilibrium	ISO 62	%	1.3 2.0	
Mold shrinkage flow (Thickness : 3.2mm) transverse		%	1.2 1.6	
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 .