

## UNITIKA NYLON6

**Type : Lubricating nylon**

Property	Standard	Unit	A 1 0 3 0 T F	
			Dry	Cond.

### **Mechanical properties**

Tensile stress at yield	ISO 527-1 527-2	MPa	68	42
Tensile stress at break				
Tensile modulus		MPa	2700	840
Tensile strain at yield		%	4.0	
Tensile strain at break			15	28
Flexural strength	ISO 178	MPa	90	30
Flexural modulus		MPa	2500	800
Charpy impact strength	ISO 179-1	kJ/m <sup>2</sup>	82	120
Charpy notched impact strength			3	12
Rockwell Hardness (R Scale)	ISO 2039		116	95

### **Thermal properties**

Coefficient of linear thermal expansion	ISO 11359-2	10 <sup>-5</sup> /	8.0	
Deflection Temperature under load 1.8MPa	ISO 75-1 75-2		53	
Deflection Temperature under load 0.45MPa			120	

### **Electrical properties**

Volume resistivity	IEC 60093	-m	3 × 10 <sup>13</sup>	7 × 10 <sup>12</sup>
Electric strength      Thickness : 1mm	IEC 60243-1	MV/m		
Dielectric constant      10 <sup>6</sup> Hz	IEC 60250		3.4	
Dissipation factor      10 <sup>6</sup> Hz	IEC 60250		0.020	
Comparative tracking Index	IEC 60112			

### **Other properties**

Density	ISO 1183	g/cm <sup>3</sup>	1.18	
Water absorption 23      in water 24h 23      /50%RH equilibrium	ISO 62	%	1.6 2.5	
Mold shrinkage      flow (Thickness : 3.2mm)      transverse		%	1.5 1.8	
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 .