

## 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 <sup>2</sup>	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 <sup>-5</sup> /	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 <sup>13</sup>	8 × 10 <sup>11</sup>
Electric strength      Thickness: 1mm	IEC 60243-1	MV/m	39	36
Dielectric constant      10 <sup>6</sup> Hz	IEC 60250		3.3	
Dissipation factor      10 <sup>6</sup> Hz	IEC 60250			
Comparative tracking Index	IEC 60112			

### **Other properties**

Density	ISO 1183	g/cm <sup>3</sup>	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 .