

## UNITIKA NYLON6

**Type : Glass-fiber 30% reinforced nylon**

Property	Standard	Unit	A 1 0 3 0 GFL	
			Dry	Cond.

### **Mechanical properties**

Tensile stress at yield	ISO 527-1 527-2	MPa		
Tensile stress at break			170	110
Tensile modulus		MPa	9600	6000
Tensile strain at yield		%		
Tensile strain at break			3.1	5.3
Flexural strength	ISO 178	MPa	250	160
Flexural modulus		MPa	8200	5000
Charpy impact strength	ISO 179-1	kJ/m <sup>2</sup>	70	85
Charpy notched impact strength			11	19
Rockwell Hardness (R Scale)	ISO 2039		120	107

### **Thermal properties**

Coefficient of linear thermal expansion	ISO 11359-2	10 <sup>-5</sup> /	3.1	
Deflection Temperature under load 1.8MPa	ISO 75-1 75-2		203	
Deflection Temperature under load 0.45MPa		217		

### **Electrical properties**

Volume resistivity	IEC 60093	-m	2 × 10 <sup>13</sup>	7 × 10 <sup>11</sup>
Electric strength      Thickness: 1mm	IEC 60243-1	MV/m	42	40
Dielectric constant      10 <sup>6</sup> Hz	IEC 60250		3.3	3.6
Dissipation factor      10 <sup>6</sup> Hz	IEC 60250		0.022	0.120
Comparative tracking Index	IEC 60112		550	

### **Other properties**

Density	ISO 1183	g/cm <sup>3</sup>	1.36	
Water absorption 23 in water 24h 23 /50%RH equilibrium	ISO 62	%	1.3	2.0
Mold shrinkage      flow (Thickness : 3.2mm)      transverse		%	0.2	0.7
Flammability	UL-94		0.75mmt 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 .