

## UNITIKA NYLON6

**Type : Mineral-filled (35%) nylon**

Property	Standard	Unit	A 3 1 3 0	
			Dry	Cond.

### **Mechanical properties**

Tensile stress at yield	ISO 527-1 527-2	MPa		
Tensile stress at break			70	50
Tensile modulus		MPa	6400	3200
Tensile strain at yield		%		
Tensile strain at break			2.9	3.8
Flexural strength	ISO 178	MPa	118	70
Flexural modulus		MPa	6300	3300
Charpy impact strength	ISO 179-1	kJ/m <sup>2</sup>	41	48
Charpy notched impact strength			3	6
Rockwell Hardness (R Scale)	ISO 2039		119	103

### **Thermal properties**

Coefficient of linear thermal expansion	ISO 11359-2	10 <sup>-5</sup> /	5.0	
Deflection Temperature under load 1.8MPa	ISO 75-1 75-2		130	
Deflection Temperature under load 0.45MPa			196	

### **Electrical properties**

Volume resistivity	IEC 60093	-m	2 × 10 <sup>13</sup>	5 × 10 <sup>11</sup>
Electric strength      Thickness: 1mm	IEC 60243-1	MV/m	42	
Dielectric constant      10 <sup>6</sup> Hz	IEC 60250		3.6	
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>	1.40	
Water absorption 23 in water 24h 23 /50%RH equilibrium	ISO 62	%	1.2	
			1.8	
Mold shrinkage      flow (Thickness : 3.2mm)      transverse		%	0.4	0.8
Flammability	UL-94		0.81mmt 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 .