

## UNITIKA NYLON6

Type : Fast-cycling nylon

Property	Standard	Unit	A 1030FR	
			Dry	Cond.

### **Mechanical properties**

Tensile stress at yield	ISO 527-1 527-2	MPa	78	40
Tensile stress at break				
Tensile modulus		MPa	2500	900
Tensile strain at yield		%	4.0	24
Tensile strain at break			68	200<
Flexural strength	ISO 178	MPa	97	33
Flexural modulus		MPa	2500	900
Charpy impact strength	ISO 179-1	kJ/m <sup>2</sup>	NB	NB
Charpy notched impact strength			5	43
Rockwell Hardness (R Scale)	ISO 2039		112	90

### **Thermal properties**

Coefficient of linear thermal expansion	ISO 11359-2	10 <sup>-5</sup> /	9.6	
Deflection Temperature under load 1.8MPa	ISO 75-1 75-2		56	
Deflection Temperature under load 0.45MPa			154	

### **Electrical properties**

Volume resistivity	IEC 60093	-m	3 × 10 <sup>13</sup>	8 × 10 <sup>11</sup>
Electric strength      Thickness: 1mm	IEC 60243-1	MV/m	37	33
Dielectric constant      10 <sup>6</sup> Hz	IEC 60250		3.4	3.7
Dissipation factor      10 <sup>6</sup> Hz	IEC 60250		0.020	0.080
Comparative tracking Index	IEC 60112		>600	

### **Other properties**

Density	ISO 1183	g/cm <sup>3</sup>	1.13	
Water absorption 23      in water 24h 23      /50%RH equilibrium	ISO 62	%	1.8 2.8	
Mold shrinkage      flow (Thickness : 3.2mm)      transverse		%	1.0 1.3	
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 .