

UNITIKA NYLON6

Type : Mineral-filled (30%) nylon

| Property | Standard | Unit | A 3 0 3 0 N - 2 | |
|----------|----------|------|-----------------|-------|
| | | | Dry | Cond. |

Mechanical properties

| | | | | |
|--------------------------------|--------------------|-------------------|------|------|
| Tensile stress at yield | ISO 527-1 527-2 | MPa | | |
| Tensile stress at break | | | 75 | 49 |
| Tensile modulus | | MPa | 5400 | 2000 |
| Tensile strain at yield | | % | | |
| Tensile strain at break | | | 4.5 | 13 |
| Flexural strength | ISO 178 | MPa | 125 | 52 |
| Flexural modulus | | MPa | 4700 | 2000 |
| Charpy impact strength | ISO 179-1 | kJ/m ² | 50 | 52 |
| Charpy notched impact strength | | | 4 | 7 |
| Rockwell Hardness (R Scale) | ISO 2039 | | | |

Thermal properties

| | | | | |
|-------------------------------------------|------------------|--------------------|-----|--|
| Coefficient of linear thermal expansion | ISO 11359-2 | 10 ⁻⁵ / | 6.0 | |
| Deflection Temperature under load 1.8MPa | ISO 75-1 75-2 | | 108 | |
| Deflection Temperature under load 0.45MPa | | 194 | | |

Electrical properties

| | | | | |
|---------------------------------------------|-------------|------|--|--|
| Volume resistivity | IEC 60093 | -m | | |
| Electric strength Thickness: 1mm | IEC 60243-1 | MV/m | | |
| Dielectric constant 10 ⁶ Hz | IEC 60250 | | | |
| Dissipation factor 10 ⁶ Hz | IEC 60250 | | | |
| Comparative tracking Index | IEC 60112 | | | |

Other properties

| | | | | |
|-----------------------------------------------------------------|----------|-------------------|-------------|-----|
| Density | ISO 1183 | g/cm ³ | 1.43 | |
| Water absorption 23 in water 24h 23 /50%RH equilibrium | ISO 62 | % | 1.9 | |
| Mold shrinkage flow (Thickness : 3.2mm) transverse | | % | 0.7 | 0.8 |
| Flammability | UL-94 | | 0.85mmt V-2 | |

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 .

