

TECHNICAL DATA SHEET

NYLON 6

DESCRIPTION

Medium viscosity, fast crystallization

APPLICATION

Protects SAE thread with wide flange to protect surrounding area.

RECOMMENDED USE

Low Temp Finishing Processes, Shipping, Storage

TECHNICAL DATA

| | Item | Test Method | Result |
|-----------------------|--|-------------------|--------|
| Basic Properties | Water Absorption (%) | ASTM D-570 | 1.8 |
| | Linear Shrinkage (%) | UBE Method | 1.2 |
| | Specific Gravity | ASTM D-792 | 1.14 |
| | Compress Deflection (kgf/cm ²) | ASTM D-695 | 100 |
| | Under 1% Deflection | | |
| Mechanical Properties | TABER Abrasion (mg) | ASTM D-1044 | 7 |
| | Yield Strength (kgf/cm ²) | ASTM D-638 @ -30° | 1100 |
| | Yield Strength (kgf/cm ²) | ASTM D-638 @ 23° | 800 |
| | Yield Strength (kgf/cm ²) | ASTM D-638 @ 80° | 320 |
| | Tensile Strength (kgf/cm ²) | ASTM D-638 @ 23° | 650 |
| | Ultimate Elongation (%) | ASTM D-638 @ 23° | 100 |
| | Flexural Strength (kgf/cm ²) | ASTM D-790 @ -30° | 1400 |
| | Flexural Strength (kgf/cm ²) | ASTM D-790 @ 23° | 1100 |
| | Flexural Strength (kgf/cm ²) | ASTM D-790 @ 80° | 500 |
| | Flexural Modulus (kgf/cm ²) | ASTM D-790 @ -30° | 30000 |
| | Flexural Modulus (kgf/cm ²) | ASTM D-790 @ 23° | 28500 |
| | Flexural Modulus (kgf/cm ²) | ASTM D-790 @ 80° | 7500 |
| | Impact Resistance (kgf. cm/cm) | ASTM D-256 | 6.5 |
| | Hardness | ASTM D-785 | 120 |
| | Shear Strength (kgf/cm ²) | ASTM D-732 | 650 |

| | | | |
|-----------------------|--|---------------------------------|------------------|
| | Compress Deflection (kgf/cm ²) | ASTM D-695 @ 23° | 200 |
| | Under 1% Deflection | | |
| Electrical Properties | Volume Resistivity (Ω.cm) | ASTM D-257 | 10 ¹⁵ |
| | Volume Resistivity (Ω.cm) | ASTM D-257 | 10 ¹² |
| | Dielectric Strength (KV/mm) | ASTM D-149 | 20 |
| | Dielectric Constant | ASTM D-150 @ 60HZ | 3.9 |
| | Dielectric Constant | ASTM D-150 @ 60HZ | 9.0 |
| | Dielectric Constant | ASTM D-150 @ 10 ³ HZ | 3.8 |
| | AC Loss | ASTM D-150 @ 60HZ | 0.01 |
| | IEC (V) | UL746 | 600+ |
| | AC Loss | ASTM D-150 @ 10 ⁶ HZ | 0.12 |
| | Arc Resistance (S) | ASTM D-495 | 119 |
| Thermal Properties | Flammability | UL94 | V-2 |
| | Thermal Deflection Temp. (°C) | ASTM D-648 | 75 |
| | Thermal Deflection Temp. (°C) | ASTM D-648 | 180 |
| | Melting Point (°C) | DSC | 215-225 |
| | Thermal Expansion Rate (X 的 10 ⁻⁵ cm/cm/°C) | ASTM D-696 | 8 |

The above values are typical values and should be used only as a guide. Due to the nature of process variables, Echo makes no warranty or guarantee on the use of this product in a specific process and user should always test material in their own process before running production.