

INSULTHERM® ULTRA FLEX® PRO HEAVY WALL CONSTRUCTION · CONTINUOUS FILAMENT E-TYPE GLASS STAYS FLEXIBLE IN LOW TEMPS

The heavy wall (1/32") construction, large available diameters and high expandability of Insultherm® Ultra Flex® Pro provides a high level of protection and ease of installation when used to insulate pipes and hoses subject to abrasion and vibration. Ultra Flex® Pro cuts easily with scissors, and special heat treated construction minimizes fraying and dusting during assembly.

SIZING CHART

| Nominal | Part # | Min Evnencien | Max Expansion Wall Thickne | Well Thickness | *Put-Ups | Available | Lbs/ | |
|---------|-----------|---------------|----------------------------------|----------------|----------|-----------|----------|-------|
| Size | Part # | Min Expansion | | wan inickness | М | L | Colors 1 | 100' |
| 1/2" | FHH0.50NT | 3/8" | 5/8" | .025" | 50' | 100' | 1 | 3.50 |
| 3/4" | FHH0.75NT | 5/8" | 1 ⁵ / ₃₂ " | .040" | 50' | 100' | 1 | 8.00 |
| 1" | FHH1.00NT | 7/8" | 1%" | .032" | 25' | 50' | 1 | 7.00 |
| 1¼" | FHH1.25NT | 1" | 13/4" | .035" | 25' | 50' | 1 | 10.50 |
| 1½" | FHH1.50NT | 11/8" | 21/8" | .035" | 25' | 50' | 1 | 10.00 |

^{*}Put-Ups: "M" = Shop Spool and "L" = Bulk Spool



FEATURES

| Material | Fiberglass |
|----------------|----------------|
| Grade | FHH |
| Wall Thickness | Refer To Chart |
| Drawing Number | TF001FHH-WD |
| Cutting | Scissors |

CUI UDG



Natural (NT)

CERTIFICATIONS









HIGH TEMPERATURETechnical Data Sheet





| Abrasion Resistance | MEDIUM |
|--------------------------------------------|-----------------|
| Abrasion Test Machine | Taber 5150 |
| Abrasion Test Wheel | Calibrase H-18 |
| Abrasion Test Load | 500g |
| Room Temperature | 75°F |
| Humidity | 72% |
| Individual Fibers Visibly Broken | 150 Test Cycles |
| Braid Worn Through In One Direction | 500 Test Cycles |
| Material Destroyed | 525 Test Cycles |
| Pre-Test Weight | 20,831.10 mg |
| Post-Test Weight | 19,203.20 mg |
| Test End Loss Of Mass Point Of Destruction | 1,140.51 mg |

PHYSICAL PROPERTIES

| Monofilament Diameter (ASTM D-204) | NA |
|--------------------------------------------|-----------|
| Flammability Rating | VW-1 |
| Recommended Cutting | Scissors |
| Colors | 1 |
| Wall Thickness | .025"035" |
| Tensile Strength (Yarn) (ASTM D-2256 Lbs) | NA |
| Specific Gravity (ASTM D-792) | 1.0-1.8 |
| Moisture Absorption % (ASTM D-570) | .01 |
| Hard Vacuum Data (ASTM E-595 at 10-5 torr) | NA |
| TML | .01 |
| CVCM | .00 |
| WVR | .00 |
| Smoke D-Max (ASTM E-662) | NA |
| Outgassing | Low |
| Oxygen Index (ASTM D-2863) | NA |

FLAMMABILITY

| Rating | VW-1 |
|--------|------|
| | |

OPERATING TEMPERATURES

| Melt Point (ASTM D-2117) | 2,048°F / 1,120°C |
|----------------------------------|-------------------|
| Maximum Continuous (Mil-I-23053) | 1,202°F / 650°C |
| Minimum Continuous (Mil-I-23053) | -94°F / -70°C |

CHEMICAL RESISTANCE

| 1=No Effect 2=Little Effect 3=Affected | 4=More Affected 5=Severely Affected |
|----------------------------------------|-------------------------------------|
| Aromatic Solvents | 1 |
| Aliphatic Solvents | 1 |
| Chlorinated Solvents | 1 |
| Weak Bases | 1 |
| Salts | 1 |
| Strong Bases | 1 |
| Salt Water (0-S-1926) | 1 |
| Hydraulic Fluid (MIL-H-5606) | 1 |
| Lube Oil (MIL-L-7808) | 1 |
| De-Icing Fluid (MIL-A-8243) | 1 |
| Strong Acids | 2 |
| Strong Oxidants | 2 |
| Esters/Ketones | 1 |
| UV Light | 2 |
| Petroleum | 1 |
| Fungus (ASTM G-21) | 1 |
| Halogen Free | Yes |
| RoHS | Yes |
| SVHC | None |

www.TECHFLEX.com