

# SUMITUBE® NH (TW)

## NON-HALOGEN FLEXIBLE POLYOLEFIN, THIN WALL 2 : 1 Shrink Ratio



RoHS Compliant



Lead-Free



Halogen-Free

### TYPICAL FEATURES

- 1) SUMITUBE NH(TW) is a halogen free, flame-retarded, flexible, heat-shrinkable, thin-wall polyolefin tubing with reduced acid gas emission and smoke generation.
- 2) Shrink temperature is 115°C.
- 3) Operating temperature range is -55°C to +105°C.
- 4) SUMITUBE NH(TW) is recommended for use in environments where safety is an important consideration, in case of fire or overheating of electrical circuits.

### STANDARD SIZES

NOMINAL SIZE	INSIDE DIAMETER AS SUPPLIED (MIN.)		INSIDE DIAMETER AFTER RECOVERY (MAX.)		WALL THICKNESS AFTER RECOVERY (NOM)	
	INCH	(MM)	INCH	(MM)	INCH	(MM)
1/8	.125	3.2	.062	1.6	.020	0.51
3/16	.187	4.8	.093	2.4	.020	0.51
1/4	.250	6.4	.125	3.2	.025	0.64
3/8	.375	9.5	.187	4.8	.025	0.64
1/2	.500	12.7	.250	6.4	.025	0.64
3/4	.750	19.1	.375	9.5	.030	0.76
1	1.000	25.4	.500	12.7	.035	0.89
1 1/2	1.500	38.1	.750	19.1	.040	1.02
2	2.000	50.8	1.000	25.4	.045	1.14
3	3.000	76.2	1.500	38.1	.050	1.27
4	4.000	101.6	2.000	50.8	.055	1.40

**Standard Colors:** Black. (Colors available by factory quote)

**Standard Package:** Spooled (S)

**How to Order:** (Type of material) (Size) (Color) (Packaging)

**Example:** NH (TW) 1/4 Black S

# NH (TW) SPECIFICATION VALUES

PROPERTY (UNITS)	TEST METHOD	REQUIREMENT
<b>Physical:</b> Tensile strength (psi) Elongation (%) Specific gravity Low temperature flex. (-55° C) Heat shock (225°C, 4hrs.) Heat resistance (150° C, 168 hrs.)  Elongation (%) Secant modulus (psi) Longitudinal change (%)	ASTM D638 ASTM D638 ASTM D792 AMS-DTL-23053 AMS-DTL-23053  ASTM D638 ASTM D882 AMS-DTL-23053	1500 min. 200 min. 1.5 nom. no cracking no cracking  100 min. 2.5 x 10 <sup>4</sup> max. +5, -15
<b>Electrical:</b> Dielectric strength (volts/mil) Volume resistivity (ohm-cm)	ASTM D876 ASTM D876	500 min. 1.0 X 10 <sup>13</sup> min.
<b>Chemical:</b> Copper mirror corrosion (175° C,168 hrs.) Water absorption (%) Fluid resistance (23° C, 24 hrs.) MIL-T-5624 MIL-H-5606 MIL-L-23699 MIL-A-8243 O-S-1296 Tensile strength (psi)  Dielectric strength (volts/mil) Flammability Smoke index (D <sub>M</sub> )  Acid gas generation (as hydrogen halides), %	AMS-DTL-23053 ASTM D570  ASTM D638  ASTM D876 AMS-DTL-23053 (4.6.15.1) ASTM E 662  MIL-C-24643	no corrosion 1.0 max.  1,000 min., except 800 min. for MIL-T-5624 400 min. 60 seconds max. flaming mode 70 max. non-flaming mode 100 max. 0.2 max.



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