

# Tubolit® Tubolit® SS

## Tubular Foam Insulation



Tubolit® and Tubolit SS premium quality closed-cell polyethylene foam insulations are used in residential, commercial and industrial projects to prevent heat loss and protect pipes from freezing. Tubolit SS has an integrated self-sealing system that makes it quick and easy to install.

## APPLICATIONS

Tubolit is used to retard heat loss on hot water pipes and prevent freezing of all water pipes. It is available in wall thicknesses of 3/8", 1/2", 3/4" and 1", in sizes ranging from 3/8" CTS to 4" IPS.

Tubolit has a low thermal conductivity and very low water vapor transmission rate. This low density product demonstrates excellent thermal, physical and chemical resistant properties and has a broad service temperature range between -297°F and 200°F (-183°C and 93°C). It can be installed in commercial, industrial and residential insulation projects. It is acceptable for use with heat tracing/heat tape.

## BENEFITS

Tubolit and Tubolit SS are fiber-free and 100% non-particulating polyethylene foam pipe insulation. Its closed-cell structure won't wick moisture and helps prevent the absorption of condensation that could cause mold to develop over time. Tubolit SS has an easy-to-install self-seal closure system.

## INSTALLATION

Tubolit pipe insulation is semi-slit, and can be completely slit by hand.

Tubolit SS is pre-slit with a factory applied pressure sensitive adhesive (PSA) to both seam surfaces and has a release liner for easy installation. All butt joints should be properly sealed. Tubolit and Tubolit SS are easy to cut with a knife and can be fabricated to go around P-traps and fittings.

## Features

- CFC/HCFC Free
- Non-porous
- Low VOCs
- Halogen Free
- Fiber Free
- Resistant to Mold Growth
- Made in USA

## Specification Compliance

- ASTM C-1427, Type 1
- ASTM E 84 1" 25/50
- NFPA 90 A/B / Acceptable for use in duct/plenum applications
- Greenguard Gold Certified



## Technical Data: Tubolit® and Tubolit SS

### Approvals, Certifications, Compliances:

- GREENGUARD Gold Certified.
- Manufactured without CFCs, HFCs, HCFCs, PBDEs, or Formaldehyde
- Plenum Rated
- UL 94 HBF, File E55798

### Typical Properties

Physical Properties	Testing Parameters	Tubolit Insulation	Test Methods
Thermal Conductivity (K) Btu • in/hr • ft <sup>2</sup> • °F (W/mK)	90°F (32°C) Mean Temperature 75°F (24°C) Mean Temperature 50°F (10°C) Mean Temperature	0.275 (0.040) 0.270 (0.039) 0.265 (0.038)	ASTM C 177/C 518
Operating Temperature Range Flexible to -100°F (-73°C)	Upper range Lower Range	200°F (93°C) -297°F (-183°C)	
Water Vapor Permeability Dry Cup. Perm-In		0.02	ASTM E 96 Procedure A
Ozone Resistance		Pass	ASTM D 1171
Chemical / Solvent Resistance		Good	
Mildew Resistance / Air Erosion		Pass	UL 181
Flame Spread and Smoke Developed Index through 1" (25 mm) thickness*		25/50 rated	ASTM E 84

\* Cellular plastics and thermoplastics, such as polyethylene/polyolefin insulation, that may drip, melt, delaminate or draw away from the fire, present unique problems and require careful interpretation of the test results.

### R-Values

Pipe O.D. or Nominal		R Value	R Value	R Value	R Value
Insulation I.D.		3/8" (10 mm) Wall	1/2" (13 mm) Wall	3/4" (19 mm) Wall	1" (25 mm) Wall
3/8"	10 mm	2.8	3.7	6.1	8.6
1/2"	13 mm	2.5	3.4	5.6	7.9
5/8"	16 mm	2.5	3.3	5.3	7.4
3/4"	19 mm	2.3	3.2	5.1	7.1
7/8"	22 mm	2.3	3.1	4.8	6.8
1-1/8"	29 mm	2.2	3.0	4.5	6.3
1-3/8"	35 mm	2.0	2.8	4.3	6.0
1-5/8"	41 mm	2.1	2.7	4.3	5.9
2"	50 mm	1.8	2.5	3.9	5.4
2-1/8"	54 mm	2.1	2.7	4.1	5.6
2-3/8"	62 mm	1.8	2.4	3.8	5.2
2-5/8"	67 mm	2.1	2.6	4.0	5.4
2-7/8"	72 mm	1.8	2.4	3.7	5.0
3-1/8"	79 mm	2.1	2.6	3.9	5.3
3-1/2"	89 mm	1.8	2.3	3.6	4.9
3-5/8"	92 mm	2.5	2.6	3.9	5.2
4-1/8"	105 mm	2.5	2.7	3.9	5.2
4-1/2"	115 mm	1.7	2.3	3.5	4.7

Note: "R" values were calculated using a K factor of 0.27 (75° F, 24° C mean temp.) and nominal all thickness in each case. Lower operating temperatures will result in improved R values. Contact Technical Services for specific recommendations.

### Sizes

Wall Thickness (nominal) 3/8" 1/2", 3/4" and 1" (10, 13, 19 and 25 mm)  
 Inside Diameter, Tubular 3/8" to 4" IPS ID (10 mm to 114 mm ID)  
 Length of Sections, Tubular 6' (1.83 m)

### Outdoor Use

Painting with WB Finish or other protective jacketing is required to prevent damage to the insulation in exterior applications and to comply with the insulation protection sections of the International Energy Conservation Code (IECC) and ASHRAE 90.1.

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