



THERMALLY EFFICIENT PLAIN FIBERGLASS PIPE INSULATION

Plain fiberglass pipe insulation is a high-performance molded insulation made from heavy density resin bonded inorganic glass fibers and produced in 36 inch lengths.

Used primarily to insulate standard iron pipe, plastic pipe, copper tubing or other polymer pipe applications.

Applications

Plain fiberglass pipe insulation is suitable for installation over hot, cold, concealed and exposed piping systems with operating temperatures up to 850°F (454°C).

For outdoor applications it is recommended that a weather-protective jacketing is installed. Operating Temperature Limits: 0°F to 850°F (-18°C to 454°C).

Physical Properties

Property	Test Method	Value
Density (size dependent)	ASTM C302	3.5 to 5.5 pcf
Operating Temperature Range ¹	ASTM C411	0°F to 1,000°F (-18°C to 538°C)
Water Vapor Sorption	ASTM C1104	Less than 5% by weight
Corrosion	ASTM C665	Pass – steel, copper, and aluminum
Corrosion	ASTM C1617	Pass - steel
Surface Burning Characteristics ²	UL 723, ASTM E84 or CAN/ULC-S102	Flame Spread 0 Smoke Developed 0

1. With heat-up schedule when operating temperatures between 850°F and 1,000°F.

2. The surface burning characteristics of these products have been determined in accordance with UL 723, ASTM E84 or CAN/ULC-S102. Values are reported to the nearest 5 rating.

Features

- Insulation is tailored to fit with:
 - A flexible core to compress over copper and some small-bore iron, PVC and polymer pipes and fittings, saving time by eliminating the need to fillet
 - A rigid core for fast and easy fabrication on larger pipes
- The product has a maximum operating temperature of 1,000°F (538°C) (with heat-up schedule)
- The product does not contain Polybromodiphenyl ethers (PBDE) (penta-, octa-, or deca-brominated diphenyl)
- UL Labeled for Flame Spread Index of 0 or less and Smoke Developed Index of 0 and is fully building code compliant

Thermal Conductivity

Mean Temperature °F	k Btu-in/hr-ft ² -°F	Mean Temperature °C	λ W/m-°C
50	0.22	10	0.032
75	0.23	25	0.034
100	0.24	50	0.037
150	0.27	100	0.043
200	0.29	125	0.047
250	0.32	150	0.051
300	0.35	175	0.056
350	0.39	200	0.062
400	0.43	225	0.068
450	0.48	250	0.075
500	0.54	275	0.082

Apparent thermal conductivity values determined in accordance with ASTM practice C1045 with data obtained by ASTM Test Method C335. Values are nominal, subject to normal testing and manufacturing tolerances.

Standards, Codes Compliance

- ASTM C547, Mineral Fiber Pipe Insulation: Type I, Grade A; and Type IV, Grade B
- ASTM C585, Inner and Outer Diameters of Thermal Insulation for Nominal Sizes of Pipe and Tubing
- NFPA 90A and 90B
- ASTM C795, Thermal Insulation for Use in Contact with Austenitic Stainless Steel3
- Nuclear Regulatory Commission Guide 1.36, Non-Metallic Thermal Insulation3
- MIL-PRF-22344E, Insulation, Pipe, Thermal, Fibrous Glass
- MIL-DTL-32586, Insulation, Thermal and Acoustic, Fibrous Glass; Type I; Form 4; Facing A
- MIL-DTL-24244D (Ships) Insulation Material with Special Corrosion, Chloride, and Fluoride Requirements3
- US Coast Guard 164.109/70/0 Non-Combustible
- NFPA 90A and 90B