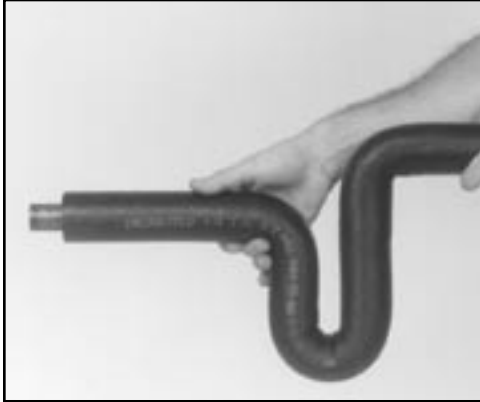




- Thermal Conductivity
- Water Vapor Transmission
- Combustion Properties

Made in
America

The Recognized Leader in Engineered Polymer Foam Insulation Technology™



IMCOLOCK: Supplied with PSA closure system

ARCTICTHERM: White; same features as Imcolock

Features & Benefits

- Meets requirements of ASTM C 1427
- Water vapor transmission rate of 0.0 perm-in
- Working temperature range of -330°F to +210°F
- Flame spread rating of not greater than 25 and a smoke density rating of not greater than 50 when tested in accordance with ASTM E 84 to 1" thickness
- Broad range of chemical resistance
- Non-porous, fiber free and resistant to mold growth
- Halogen free — non-corrosive to piping
- Can be directly buried underground (please consult a sales representative for proper applications)

Flame and Smoke Rating

All IMCOA polyolefin insulation products through 1" thickness meet ASTM E 84 flame spread rating of not greater than 25, and smoke developed rating of not greater than 50. IMCOA polyolefin insulation products are acceptable for use in duct/plenum applications meeting the requirements of NFPA 90A/90B.

Applications

- Chilled water systems
- Halogen refrigeration systems
- Ammonia refrigeration systems
- Glycol refrigeration systems
- Humidifier piping
- Plenums and air ducts
- Condensate drain lines
- Residential hot & cold water
- Underground piping
- Tanks and vessels
- Cryogenic systems

IMCOLOCK and ARCTICTHERM are produced in 6 foot lengths in the following sizes:

Nominal Wall Thickness	Pipe Size	Pipe Type
3/8", 1/2", 3/4", & 1"	3/8" - 4-1/2"	IMCOLOCK
3/8", 1/2", 3/4", & 1"	3/8" - 4-1/2"	ARCTICTHERM

NOTE: Imcolock® and Arcticterm® Pipe Insulation is made from UV resistant polyolefin resins. For moderate UV exposure, no additional protection is needed. However, for severe UV exposure (rooftop applications) or where optimum performance is required, the product must be protected from the elements. Various jacketing or cladding materials are recommended, ie. PVC, CPVC, AL, etc. Coatings are not recommended because of poor adhesion to the polyolefin surface.

Technical Data

IMCOLOCK and ARCTICTHERM are closed-cell polyolefin insulation products that answer the demands and problems of modern plumbing, HVAC, and refrigeration applications. Meets requirements of ASTM C 1427. Should additional information on these or other products be needed, please call or fax your inquiry to the numbers listed below.

Physical Characteristics	Units	Properties	Testing Methods
Maximum Operating Temperature	°F	210	ASTM C 411
Minimum Operating Temperature	°F	-330	
Color		Black/White	
Density	lbs/ft ³	1.5	ASTM D 1622, ASTM D 3575
Water Vapor Permeability	Perm-in	0.0	ASTM E 96
Water Absorption	% by Vol.	0.0	ASTM C 209
Linear Shrinkage @ 200°F	%	less than 4.0	ASTM C 1427
Mold Growth/Humidity; Air Erosion		None	UL 181, Sections 12 & 17
Flame Spread (up to 1" wall)		not greater than 25	ASTM E 84 CAN/ULC-S102.2-M88
Smoke Density (up to 1" wall)		not greater than 50	ASTM E 84 CAN/ULC-S102.2-M88
Thermal Conductivity @ 75°F	Btu-in/hr-ft ² -°F	0.25	ASTM C 177, ASTM C 518

Specification Compliance ASTM C 1427, NFPA 90 A/B.

- Factory Mutual Research Corporation, Approved and Listed in Approval Guide
- New York City Department of Buildings, MEA #363-95-M
- City of Los Angeles, General Approval, Research Report RR 8316
- Dade County, Florida, Product Control Approved, Acceptance No. 95-1215.08

Pipe "R" Values per square foot

Pipe O.D. or Nominal Insulation I.D.		R Value 3/8" (10 mm) Wall	R Value 1/2" (13 mm) Wall	R Value 3/4" (19 mm) Wall	R Value 1" (25 mm) Wall
3/8"	10 mm	2.5	3.6	6.0	8.8
1/2"	13 mm	2.3	3.3	5.5	8.0
5/8"	16 mm	2.2	3.1	5.2	7.5
3/4"	19 mm	2.1	3.0	4.9	7.1
7/8"	22 mm	2.0	2.9	4.7	6.8
1-1/8"	29 mm	1.9	2.7	4.4	6.5
1-3/8"	35 mm	1.9	2.6	4.2	6.1
1-5/8"	41 mm	1.8	2.5	4.1	5.8
2"	50 mm	1.8	2.4	3.9	5.5
2-1/8"	54 mm	1.7	2.4	3.9	5.5
2-3/8"	60 mm	1.7	2.4	3.8	5.3
2-5/8"	67 mm	1.7	2.3	3.7	5.2
2-7/8"	72 mm	1.7	2.3	3.7	5.1
3-1/8"	79 mm	1.7	2.3	3.6	5.1
3-1/2"	89 mm	1.7	2.3	3.6	5.0
3-5/8"	92 mm	1.6	2.3	3.5	4.9
4-1/8"	105 mm	1.6	2.2	3.5	4.8
4-1/2"	115 mm	1.6	2.2	3.5	4.8

Note: "R" factors were calculated using a K factor of .250 (75°F, 24°C mean temp.) and nominal wall thickness in each case. Lower operating temperatures will result in improved R values. Contact Technical Services for specific recommendations.



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