

# Imcoa® Imcoa® SS Tubular Foam Insulation



Imcoa® and Imcoa 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. Imcoa SS has an integrated self-sealing system that makes it quick and easy to install.

## APPLICATIONS

Imcoa 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.

Imcoa 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

Imcoa and Imcoa SS (formerly Imcolock) 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.

Imcoa SS has an easy-to-install self-seal closure system.

## INSTALLATION

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

Imcoa 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. Imcoa and Imcoa 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
- Dade Co., FL, Product Control Approved, Acceptance 95-1215.08
- New York City OTCR #13-09
- Sound transmission co-efficient = 11 at 1" per ASTM E90
- City of Los Angeles, Gen. Approval, Research Report RR 8316
- Greenguard Gold Certified

# Technical Data: Imcoa® and Imcoa SS

## Approvals, Certifications, Compliances:

- GREENGUARD Gold Certified.
- Manufactured without CFCs, HFCs, HCFCs, PBDEs, or Formaldehyde
- Plenum Rated

## Typical Properties

Physical Properties	Testing Parameters	Imcoa 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.

**ARMACELL LLC**  
 TEL: 800.866.5638  
 info.us@armacell.com  
 www.armacell.us  
 55 Vilcom Center Drive, Suite 200, Chapel Hill, NC 27514



Armaccell provides this information as a technical service. To the extent the information is derived from sources other than Armaccell, Armaccell is substantially, if not wholly, relying upon the other source(s) to provide accurate information. Information provided as a result of Armaccell's own technical analysis and testing is accurate to the extent of our knowledge and ability, as of date of printing, using effective standardized methods and procedures. Each user of these products, or information, should perform their own tests to determine the safety, fitness and suitability of the products, or combination of products, for any foreseeable purposes, applications and uses by the user and by any third party to which the user may convey the products. Since Armaccell cannot control the end use of this product, Armaccell does not guarantee that the user will obtain the same results as published in this document. The data and information are provided as a technical service and are subject to change without notice. GREENGUARD Certified products are certified to GREENGUARD standards for low chemical emissions into indoor air during product usage. For more information, visit [ul.com/gg](http://ul.com/gg).

Imcoa and Imcoa SS	Data Sheet	091	Eng/USA	9/2017
--------------------	------------	-----	---------	--------