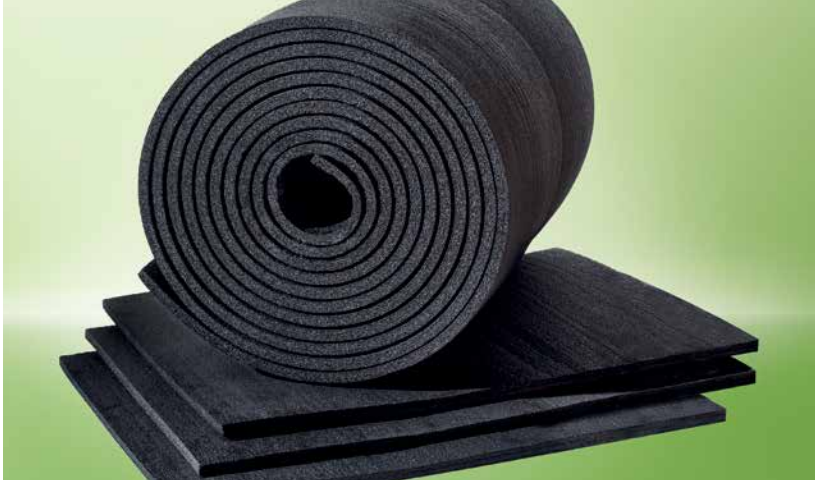
Imcosheet®

Sheet and Roll Foam Insulation



Imcosheet® premium quality closed-cell polyethylene foam insulation is used in residential, commercial and industrial projects to prevent heat loss and protect pipes from freezing. Imcosheet is very flexible making it easy to cut and install.

APPLICATIONS

Imcosheet insulation is used to retard heat flow and provide condensation control on large diameter piping, tanks, vessels and equipment. It can be used for both indoor and outdoor applications.

Imcosheet 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).

RESISTANCE TO MOISTURE

The closed-cell structure and unique formulation of Imcosheet effectively retards the flow of moisture vapor, and is considered a low transmittance vapor retarder. For most indoor applications, Imcosheet needs no additional protection. Additional vapor barrier protection may be necessary for Imcosheet when installed on low temperature surfaces that are exposed to continuous high humidity.

INSTALLATION

When Imcosheet is applied to equipment, use 100% coverage of Armaflex 520 contact adhesive. Both surfaces to be joined should be coated and then joined after adhesive is dry to the touch. Compression joints with adhesive applied should be used on all butt edges.

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 2
- New York City OTCR #13-09
- ASTM E 84 1" 25/50
- CFC/HCFC Free
- Low VOCs
- Halogen Free
- Non-porous
- Fiber Free
- Resistant to mold growth
- Sound transmission co-efficient = 11 at 1" per ASTM E 90

armacell®

GREENGUARD
PRODUCT CERTIFIED FOR LOW CHEMICAL EMISSIONS
UL.COM/GG
UL 2818
GOLD

Technical Data: Imcosheet®

Typical Properties

Physical Properties	Testing Parameters	Imcosheet Insulation	Test Methods
Thermal Conductivity (K) Btu • in/hr • ft² • °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 / ASTM 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. 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.

Sound Absorption Co-efficients at Frequency

ASTM E-795 Type A Mounting / Sabins / Sq. Ft.

Thickness	125Hz	250Hz	500Hz	1000Hz	2000Hz	4000Hz	NRC
1/4"	0.00	0.03	0.05	0.10	0.25	0.45	0.10
1/2" (12 mm)	0.03	0.04	0.08	0.15	0.40	0.25	0.20
1" (25 mm)	0.10	0.15	0.45	0.30	0.40	0.33	0.35

R-Values

Per Sqare Foot

3/8" (10 mm)	1/2" (13 mm)	3/4" (19 mm)	1" (25 mm)	1-1/2" (38 mm)	2" (50 mm)	2-1/2" (63 mm)
1.4	1.9	2.8	3.7	5.6	7.4	9.3

Note: "R" values were calculated using a K factor of 0.27 (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.

Sizes

Sheet Width and Length: 3' x 4' (0.92 m x 1.22 m)
Thickness (nominal): 1/4", 3/8", 1/2", 3/4", 1", 1-1/2", 2", 2-1/2" (6.4 mm, 10 mm, 13 mm, 19 mm, 25 mm, 38 mm, 51 mm, 64 mm)

Roll Width and Length: 4' x 50' (1.22m x 15.3m)
Thickness (nominal): 3/8", 1/2", 3/4", 1", 1-1/2", 2", 2-1/2" (10 mm, 13 mm, 19 mm, 25 mm, 25 mm, 38 mm, 51 mm, 64 mm)

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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