

## Insulation Products



Complete line of quality, tested insulation products for the air conditioning, refrigeration and heating industries.

**N**u-Calgon has developed and provides insulation products to meet the rigorous demands of today's HVACR service engineers. Cork tape that remains flexible, has excellent paper release, contains no asbestos, and is unsurpassed in adhesive strength. Foam tape that is made from closed cell construction, has excellent paper release, and adheres to all surfaces. Insulation cords with unmatched insulating and adhesive abilities. Insulation slugs with the same excellent features and individually wrapped in 1 lb. bars. Polyurethane, prepolymer foam spray, that expands to seal, fill, and insulate small cracks in many different areas.

### Perma-Wrap®

Perma-Wrap Foam Insulation Tape is formulated from the highest quality elastomeric thermal insulation material. It is manufactured in accordance with selected specifications to meet the needs of today's air conditioning, refrigeration applications. Its closed-cell construction seals out air, retarding heat transfer and providing complete insulation. The acrylic laminate glue allows for greater service temperatures and a more secure bond that won't deteriorate with moisture.

Perma-Wrap can be used on cold water pipes, chilled water lines and refrigerant lines to prevent sweating and condensation. It can also be used on hot water lines for better insulation against heat loss. Keeps cold lines cold and hot lines hot. Can be over-lapped or the edges can be butted. Service temperatures can be as low as -20°F with a high continuous temperature of 160°F and high intermittent temperatures of 220°F. (2" x 1/8" x 30')

**Part Number: 4218-W3**

**Part Number: 4218-12 - Dispenser Package**

### Notes on using:

In using cork and foam tape, one of the most common applications in air conditioning and refrigeration is for preventing sweating or condensation on pipes. The amount of tape required and style of wrap (butting edges, over-lapping or both) will depend upon relative humidity, ambient temperature and pipe temperature. However, the application must be sufficient to keep the surface of the outer layer above the dew point of the surrounding air to control condensation.

### FOAM-TITE™

Foam-Tite is our economical grade foam insulation tape. It is a PVC tape with closed cell construction to insure excellent insulation against heat loss on hot lines. Foam-Tite can also be used to insulate cold water lines, chilled water lines and refrigerant lines and prevent sweating and condensation. Continuous service temperature ranges are as low as -15°F with a high continuous temperature 160°F. (2" x 1/8" x 30')

**Part Number: 4219-12**

### CORK TAPE™

Insulation Tape was developed specifically for the air conditioning and refrigeration industry. Our tape has been formulated and manufactured to meet specific specifications as an insulating material for preventing sweating and condensation on refrigerant lines, cold pipes and other commercial refrigeration and air conditioning systems. It also can serve as an excellent insulator on hot pipes, wrapping valves, tees, fittings, gasketing material and even used for sound-deadening material. It can be applied at temperatures as low as -30°F, as high as 200°F and won't sag at 350°F. (2" x 1/8" x 30')

**Part Number: 4217-W3**

### CORK-TITE®

Cork-Tite is our economical grade cork insulation tape specially designed for all types of climates. It insulates cold pipes for all kinds of air conditioners used in cars, homes, freezers and refrigerators and helps stop sweating and other condensation problems. Ideal for retarding heat gain in cold pipes and preventing heat loss in hot pipes. Cork-Tite sticks to all kinds of dry metals and it seals tightly without drying. It is flexible and does not shrink or melt within the service temperature of -20°F to 200°F. (2" x 1/8" x 30')

**Part Number: 4217-12**



## INSULATION SEALING & CAULKING CORDS

Nu-Calgon Insulation Sealing Cords are nonstaining sealers formulated from the highest quality raw materials. They are water-resistant, dust-resistant and white in color, non-staining and non-hardening with excellent adhesion to most surfaces and an excellent insulation value. (3/8" x 25')

**Part Number: 4216-27**

## THUMB-TITE®

Thumb-Tite is formulated and manufactured for use in many sealing, insulating and general maintenance applications. It has excellent adhesion capability and is non-staining, non-hardening and unaffected by wide variations in temperature and is an excellent thumbing grade. Thumb-Tite remains flexible at -20°F and is non-sagging up to 350°F. It is packaged in 2 lb. boxes, each box containing two one-pound bars.

**Part Number: 4216-92 - 2 lb. box**

## NU-FOAM®

Nu-Foam is an expanding, polyurethane, prepolymer foam that is used as a sealant and an insulating product. It is designed to seal, fill and insulate small cracks, gaps and voids, and is suitable for many HVAC applications. Nu-Foam expands into cracks and is tack-free in 30 minutes and completely dry in about 4 hours. This product is fire retardant, UL listed and has an R-Value of 4.9 per inch thick.

**Part Number: 4293-04 - 9 ounce can**

**Part Number: 4293-75 - 20 ounce can**

TABLE 1		
CORK TAPE COMPARATIVE TESTS		
	NU-CALGON	OTHER LEADING BRAND
Tensile PSI	18	16
	100% Cohesive Elongation >500%	100% Adhesive Elongation <200%
Hardening: %	18%	37%
100 gram Needle Point Penetration	57	72
Sag at 350°F	None	1/16" lost adhesion
Thermal Conductivity	0.88	0.99

TABLE 2		
PERMA-WRAP TEST DATA		
PROPERTY	TEST METHOD	TYPICAL RESULT
Tensile	ASTM D412 - Die A	35-60 psi (241-414 kPa)
Elongation	ASTM D412 - Die A	150 - 250%
Tear Resistance	ASTM D624 - Die C	6.0-10.0 pli (10.5-17.5 N/cm)
Service Temp. High	---	160°F (71°C)
Service Temp. Low	---	-20°F (-29°C)
Thermal Conductivity	ASTM C177	1.27 BTU in/hr ft <sup>2</sup> °F
Flammability	FMVSS-302 UL94	4"/minute max Burn Rate* 5VA Rating*

**Tensile PSI:** 1/16" thick sample is compressed between two aluminum discs in a 2 inch square area. Sample held under compression for 15 minutes. Tested at 2" per minute.

**Hardening:** Condition sample for penetrometer in a 158°F oven for one week. Condition sample in 75°F water bath for one hour before determining 100 gram needle point penetration.

**Sag:** Place 1/8"x 2"x 2" piece of cork tape on aluminum plate. Condition at 75°F for one hour. Place sample in 350°F oven. Measure flow or sag after 24 hours.

**Thermal Conductivity:** This is a direct measure of the insulation capability of the tape. The smaller the value, the better the insulation provided.

