OWENS/CORNING FIBERGLAS TRADEMARK®

MATERIAL SAFETY DATA SHEET

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DATE OF PREPARATION: July 20, 1987

PRODUCT NAME(S): Fiberglas® Insulation, Kraft Faced Insulation, Foil Faced Insulation, Blowing Wool, ThermaCube® Insulation, Type M Plus, Appliance Insulation, ASJ Pipe Covering, Pipe Wrap, 700 Series Industrial Insulation, Navy Board, Hull Board, Marine Insulation, Acoustical Ceiling Blanks, 475 FRK Duct Board, Aeroflex® Duct Liner, Duct Wrap, Molded Pipe, Sill Sealer, Mobile Home Insulation, Warm-N-Dri® Insulation, CW225 Insulation, Flame Spread 25 Insulation, Sonobatts, Commercial Use Board, Noise Barrier Batts, Roof Insulation, Thermal Insulating Wool, Insul-Quick®, Certified R Metal Building Insulation, RA Insulation, FDM Insulation

SECTION I - COMPONENT DATA

HAZARDOUS INGREDIENTS

COMMON NAME	CHEMICAL NAME	C.A.S. NUMBER
Fiberglass Wool	Fibrous Glass	65997-17-3

SECTION II - PHYSICAL DATA

BOILING POINT (°F): NA* SPECIFIC GRAVITY (H_2O=1): ND**

MELTING POINT: NA

VAPOR PRESSURE (mmHg @ 20°C): NA

PERCENT VOLATILE BY VOLUME: NA

VAPOR DENSITY (AIR=1): NA EVAPORATIVE RATE (ETHYL ETHER=1): NA

SOLUBILITY IN WATER: Insoluble pH: NA

APPEARANCE AND ODOR: Pink, yellow, tan or black insulation which may have faint resin odor. Some products have a vinyl, kraft paper, foil or polypropylene facing.

*NA = Not Applicable **ND = Not Determined

SECTION III - FIRE & EXPLOSION HAZARD DATA

FLASH POINT (°F): NA METHOD USED: NA

FLAMMABILITY LIMITS:

LEL: NA UEL: NA

AUTO-IGNITION TEMPERATURE (°F): NA

EXTINGUISHING MEDIA: Water, Foam, Dry Chemical

SPECIAL FIRE-FIGHTING INSTRUCTIONS:

None required.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

The facing on kraft paper and foil faced products will burn and should not be left exposed. Special care should be taken when working close to the facing with an open flame. Vinyl faced products in fire conditions may give off hydrogen chloride, a highly irritating and toxic gas. Evacuate the building immediately.

SECTION IV - REACTIVITY DATA

STABILITY (CONDITIONS TO AVOID):

Stable (none)

INCOMPATIBILITY (MATERIALS TO AVOID):

None

HAZARDOUS DECOMPOSITION PRODUCTS:

Facing and binder burns or decomposes in a fire. Primary combustion products are carbon monoxide, carbon dioxide and water. Vinyl faced products will emit hydrogen chloride in a fire. Emission of hydrogen chloride begins at 525°F with faster emission as the temperature rises.

HAZARDOUS POLYMERIZATION:

Will not occur.

SECTION V - HEALTH HAZARD DATA

PRIMARY ROUTE(S) OF ENTRY: Inhalation

HEALTH HAZARDS (ACUTE AND CHRONIC)

INHALATION:

ACUTE: Mechanical irritation of the mouth, nose and throat.

CHRONIC: The International Agency for Research on Cancer (IARC) in June, 1987, classified fiberglass wool as a possible cancer causing agent to humans. This classification was based on a combined evaluation of published human and animal studies. The human data included large scale mortality studies of U.S. and European fiberglass wool factory workers. IARC concluded that the human studies did not provide sufficient evidence that fiberglass wool caused cancer in humans. The classification of fiberglass wool as a possible carcinogen to humans was substantially based on experimental animal studies in which they were exposed to wool glass fibers through non-natural routes, such as injection or implantation. IARC regards it as prudent to treat a material for which there is sufficient evidence of carcinogenicity to animals as if it is a possible carcinogen in humans.

ADDITIONAL INFORMATION: Animal inhalation experiments in which laboratory animals were exposed to large quantities of glass fiber have not resulted in a positive association between glass fibers and lung cancer.

A small study of Canadian glass wool workers reported a statistically significant increase in lung cancer mortality.

Large scale studies examining the mortality rates of U.S. and European fiberglass wool factory workers found no statistically significant differences in lung cancer rates between those workers and the populations in their local or regional communities.

While the overall mortality rates in these mortality studies were slightly raised and did increase with time since the first exposure, the increases were not related to duration of exposure or to an estimated time weighted measure of exposure.

Fiberglass continuous filament (such as used in Aeroflex Duct Liner and other textiles and reinforcements) was categorized by IARC as not classifiable with respect to human carcinogenicity. The evidence from human as well as animal studies was evaluated as insufficient to classify it as a possible, probable, or confirmed cancer causing material.

SKIN CONTACT:

ACUTE: Transient mechanical irritation.
CHRONIC: None known

EYE CONTACT:

ACUTE: Direct contact will cause mechanical irritation.
CHRONIC: None known

INGESTION:

ACUTE: Unlikely to occur. Observe individual; if symptoms develop, consult physician.

CHRONIC: None known

SIGNS AND SYMPTOMS OF EXPOSURE:

Itching and irritation of upper respiratory tract.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:

Any condition generally aggravated by mechanical irritants in air or on skin.

EXPOSURE LIMITS:

HAZARDOUS INGREDIENTS	OSHA PEL (mg/M^3)	ACGIH TLV (mg/M^3)	OTHER RECOMMENDED (SOURCE)
Fibrous Glass	5 mg/M^3 (respirable nuisance dust)	10 mg/M^3	3 x 10^6 fibers/M^3 (NIOSH)

CARCINOGENICITY:

HAZARDOUS INGREDIENTS	NTP LISTED	IARC CLASSIFIED	OSHA REGULATED
Fiberglass Wool	No	Yes	No

SECTION VI - EMERGENCY & FIRST-AID PROCEDURES

INHALATION:

Vinyl faced products in fire conditions - administer oxygen; consult physician immediately.

SKIN:

Wash with mild soap and running water. Use a washcloth to help remove fibers.

EYES:

Flush with flowing water for at least 15 minutes and if symptoms persist, seek immediate medical attention.

SECTION VII - SPECIAL HANDLING INFORMATION

VENTILATION:

May be required in some operations, such as dust generating installation or fabrication operations.

WORK HYGIENIC PRACTICES

- Dust Prevention - dust collection systems should be utilized in operations such as sawing or machining that have potential for exposure to dust and glass fibers.
- Cleanliness - the work area should be kept clean of scrap material and other dust generating debris. Keep waste disposal equipment close to the working area to avoid unnecessary handling of waste materials.
- Eye Protection - safety glasses, goggles or face shields should be worn whenever fiberglass materials are being handled or applied.

- Avoid Irritation - be careful not to rub or scratch irritated areas. Rubbing or scratching may force the fibers into the skin. (The fibers should be washed off.) Use of barrier creams can, in some instances, be helpful.

- Work Clothes - wear loose fitting, long sleeved clothing. (Skin irritation is known to occur chiefly at pressure points such as around the neck and waist.) Gloves may be useful in some applications. Use vacuum equipment to remove fibers from clothes. Compressed air should never be used. Always wash work clothes separately and wipe out the washer/sink in order to prevent loose glass fibers from getting on other articles.

- Use of Respirators

  Use of respiratory protection during manufacture - appropriate respiratory protection should be used in accordance with the directions of each manufacturer's respiratory protection program.

  Use of respiratory protection during installation or fabrication - a NIOSH or MSHA approved air purifying respirator such as the 3M Model 8710 or Model 9900 (in high humidity environments) or equivalent should be used when working with fiberglass wool products under the following conditions:

  1. installing loosefill;
  2. in any confined or poorly ventilated space;
  3. fabrication involving power tools;
  4. any installation operation or fabrication operation which creates a dusty working environment.

SECTION VIII - SPILL, LEAK & DISPOSAL PROCEDURES

ACTION TO TAKE FOR SPILLS (USE APPROPRIATE SAFETY EQUIPMENT):

NA

WASTE DISPOSAL METHOD:

Dispose in accordance with federal, state and local regulations. The primary method of disposal is in a municipal or industrial landfill.

EPA HAZARDOUS WASTE NUMBER: NA

This material is not regulated under the "RCRA" hazardous waste regulations.

SECTION IX - SPECIAL PRECAUTIONS/ADDITIONAL INFORMATION

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

Insulation should be stored in a dry place. Faced material should be stored well away from sources of ignition.