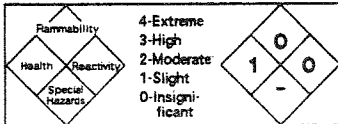


**MATERIAL SAFETY DATA SHEET**



NFPA FIRE HAZARD SYMBOL  
See NFPA 704 for detailed explanation.

No.: 3688 Rev. No.: 5  
Date Revised: 07/30/90

*How Sew*

*used in  
wall  
1/3/90  
Carpenter*

**I. PRODUCT IDENTIFICATION**

Trade Name(s) : FACED FLEXIBLE INSULATION  
Generic Name: FIBER GLASS WOOL INSULATION  
Chemical Name: Mixture

CAS #: None Assigned  
Formula: Mixture

Manufacturer: MANVILLE SALES CORPORATION  
Address: P.O. BOX 5108  
City: DENVER

Telephone: (303) 978-4900  
Emergency:  
State: CO Zip: 80217-5108

**II. PRODUCT INGREDIENTS**

| INGREDIENT NAME                                | CAS NUMBER | %     | PEL and TLV (except as noted)  |
|--|------------|-------|--|
| Fibrous Glass                                  | 65997-17-3 | 91    | 1 Fiber/cc Exposure Guideline, Manville<br>3 Fibers/cc, NIOSH<br>5mg/M <sup>3</sup> Respirable Nuisance Dust, OSHA<br>10mg/M <sup>3</sup> Total Nuisance Dust, ACGIH |
| Urea Extended Phenol-formaldehyde Resin, Cured | 25104-55-6 | 16-23 | NA   |

**III. PHYSICAL DATA**

Appearance and Odor: Amber fibrous batt or blanket with facing; Slight phenolic odor.

Boiling Point: NA  
Vapor Pressure: NA  
Water Solubility (%): NIL  
Vapor Density (Air=1): NA

Evaporation Rate (NA = 1): NA  
Specific Gravity (water = 1): VAR  
Melting Point: >1300° F  
% Volatile by Volume: 0

**IV. FIRE AND EXPLOSION DATA**

Flash Point (Method): NA  
Flammable Limits: LEL: NA % UEL: NA %  
Extinguishing Media: CO<sub>2</sub>, water, water fog, dry chemical ABC rated.  
NFPA Flammable/Combustible Liquid Classification: NA  
Auto-Ignition Temperature: ND  
Unusual Fire or Explosion Hazards: Resin and paper or plastic facings will burn causing dense acrid smoke.

Special Fire-Fighting Procedures: Wear self-contained breathing apparatus.

**V. HEALTH HAZARDS A. Summary/Risks**

Summary: Animal Studies: animals breathing high concentrations showed no disease, but some exposed through artificial means (e.g. implantation) developed cancer. Human Studies: The findings of extensive epidemiologic studies of fiberglass manufacturing workers were judged by IARC in 1987 to be inadequate for assessing cancer risk. Based primarily on the artificially exposed animal studies IARC classified glass wool as possibly carcinogenic for humans. A 1990 U.S. mortality study update reported some statistically significant findings. (See chronic health effects.)

THIS SUBSTANCE OR MIXTURE HAS NOT BEEN CLASSIFIED A CARCINOGEN BY NTP OR OSHA.  
Medical conditions which may be aggravated: As with any dust, pre-existing upper respiratory and lung diseases may be aggravated.  
Target Organ(s): Lungs, skin, eyes.  
Acute Health Effects: Product dust is a mechanical irritant to upper respiratory system, skin, and eyes.

Chronic Health Effects: Although the researchers indicate that there is no clear evidence of a relationship to fiber exposures, a 1990 update of a U.S. mortality study of fiber glass production workers reported some small, but statistically significant excess in respiratory cancer. An expanded study is investigating other possible factors.  
Primary Entry Route(s): Inhalation, skin, eye contact.

**V. HEALTH HAZARDS B. Signs/Symptoms of Overexposure**

**Inhalation:** Irritation or soreness in throat & nose. In extreme exposures some congestion may occur.

**Skin Contact:** Temporary irritation or rash.

**Skin Absorption:** NA

**Ingestion:** Not hazardous when ingested. May cause temporary irritation to gastrointestinal tract.

**Eyes:** Temporary irritation or inflammation.

**V. HEALTH HAZARDS C. First Aid/Emergency Procedures**

**Inhalation:** Remove to fresh air. Drink water to clear throat and blow nose to evacuate fibers.

**Skin Contact:** Wash affected areas gently with soap and warm water.

**Skin Absorption:** NA

**Ingestion:** NA

**Eyes:** Flush with large amounts of water. If irritation persists consult a physician.

**VI. REACTIVITY DATA**

MATERIAL IS STABLE.

HAZARDOUS POLYMERIZATION CANNOT OCCUR.

**Chemical Incompatibilities:** Hydrofluoric acid.

**Conditions to Avoid:** None in designed use.

**Hazardous Decomposition Products:** Carbon dioxide, carbon monoxide, carbon particles & traces of hydrogen cyanide derived from pyrolysis of the resin as is typical of decomposition of any organic chemical.

**VII. SPILL OR LEAK PROCEDURES**

**Procedures for Spill/Leak:** Pick up pieces. Vacuum clean dusts. If sweeping is necessary use a dust suppressant (water).

**Waste Management:** Wastes are not hazardous as defined by RCRA (40 CFR Part 261). Comply with federal, state & local regulations. Method of disposal: Landfill. Reportable quantity: NA.

**VIII. SPECIAL PROTECTION INFORMATION**

**Goggles:** or safety glasses with sideshields are recommended.

**Gloves:** Recommended.

**Respirator:** <10 f/cc use NIOSH approved dust/mist respirator; <50 f/cc use NIOSH full face respirator with H filter. For specific respirator recommendations see Manville Bulletin HSE-64C.

**Ventilation:** Use sufficient natural or mechanical ventilation to keep dust level to below PEL/TLV/WEG (Workplace Exposure Guideline).

**Other:** Wear loose fitting, long sleeved clothing. Wash exposed areas with soap & warm water after handling. Wash work clothes separately from other clothing; rinse washer thoroughly.

**Special Considerations for repair/maintenance of contaminated equipment:** NA

**IX. SPECIAL PRECAUTIONS**

**Storage Segregation Hazard Classes:** Irritant.

\*\*\* ALWAYS SEGREGATE MATERIALS BY MAJOR HAZARD CLASS \*\*\*

**Special Handling/Storage:** Keep material dry.

**Special Workplace Engineering Controls:** Provide adequate ventilation to keep dust level to below PEL/TLV/WEG (Workplace Exposure Guideline).

**Other:** Calif Prop 65 Warning: This product contains formaldehyde, a chemical known to the state of California to cause cancer. Additional information: Bulletin HSE-64C from: Manville Product Information Center, P.O. Box 5108, Denver, CO 80217-5108; 800-654-3103.

Prepared/Revised by: RICHARD A. VERSEN

Title: MANAGER, PRODUCT SAFETY

As of the date of preparation of this document, the foregoing information is believed to be accurate and is provided in good faith to comply with applicable federal and state law(s). However, no warranty or representation with respect to such information is intended or given.