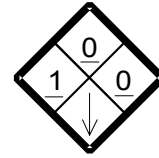


# Knauf Fiber Glass GmbH

## MATERIAL SAFETY DATA SHEET



### NFPA RATING

Health Hazard	(1)
Fire Hazard	(0)
Reactivity	(0)
Personal Protection	(e)

### SECTION I - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**Product:** Knauf Uncured Fiber Glass Insulation

**MSDS Number:** 1006

**Trade Designations:** Uncured Insulation, Amber Uncured Blanket Insulation **Revision:** 2

Black Uncured Blanket Insulation, Amber Uncured Blanket Insulation with Facing

Black Uncured Blanket Insulation with facing, Engineered Molding Media, Engineered Molding Media with Facing

**Manufacturer:** Knauf Fiber Glass GmbH

**Date Issued:** March 14, 2003

**Address:** One Knauf Drive

**Product Stewardship Support Line:** 317-398-4434, X8102

Shelbyville, IN 46176-1496

**24 hr Emergency (Chemtrec) Phone:** 800-424-9300

### SECTION II - COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS Number	%	TLV	PEL
Fibrous Glass	65997-17-3	83-97	1 fiber/cc	1 fiber /cc
Urea extended phenol formaldehyde resin	25104-55-6	3-17	None	None
Water	7732-18-5	3-6	None	None
Formaldehyde	50-00-0	0.2 max	C0.3 ppm	0.75 ppm
Phenol (skin)*	108-95-2	0.65 max	5 ppm	5 ppm

Key: TLV = ACGIH Ceiling, 8 hr. time weighted average (TWA); PEL = OSHA permissible exposure limit.

TLV and PEL limits are for respirable fibers length <5um, diameter >3um, aspect ratio <5:1 (NIOSH 7400B Method)

\* Phenol absorbed through the skin can contribute significantly to overall exposure

### SECTION III - HAZARDS IDENTIFICATION

**Emergency Overview:** The 2002 Monograph issued by the International Agency for Research on Cancer (IARC) removed fiber glass wool from its' list of possible carcinogens (Group 2B). It is now classified as Group 3, not classifiable as to human carcinogenicity.

OSHA and other U.S. government agencies still require that a warning label be placed on this product. This warning identifies a possible hazard while not identifying the degree of risk. OSHA regulations do not require respiratory protection as long as the exposure to fiber glass wool does not exceed 1 fiber/cubic centimeter (f/cc) TWA (8 hour time weighted average). Fiber Glass wool exposure in the home, commercial buildings, and manufacturing facilities are generally found to be less than 1 f/cc. Installers and fabricators should be aware of their exposure levels and take appropriate actions if needed per recommended work practices. Guidance on typical fiber exposures for various applications can be obtained from the North American Insulation Manufacturers Association, [www.NAIMA.org](http://www.NAIMA.org). Knauf STRONGLY recommends following all safe work practices while working with and/or installing fiber glass wool products.

### SECTION III - HAZARDS IDENTIFICATION

**HMIS Rating:**      **Health:** 1      **Fire:** 0      **Reactivity:** 0      **Protection:** E

**Primary Routes of Entry:** Via respirable fibers to the lungs and respiratory system and airborne fibers to the skin and eyes.

**Primary Target Organs:** Lungs, respiratory system, skin and eyes.

**Potential Health Effects:**

**Acute:** Mechanical irritation of the skin, eyes and upper respiratory system.

**Chronic:** A 1987 epidemiological study of more than sixteen thousand U.S. man-made vitreous fiber manufacturing workers has shown no statistically significant increased risks of malignant or non malignant diseases. A 1990 update of this study reported a small, statistically significant increase in respiratory cancer among workers when compared with the populations in their communities. Confounding factors such as smoking, exposure to other hazardous materials, etc., are thought to be responsible for this small apparent increase. An expanded study is currently underway to investigate other possible contributing factors.

**Skin Contact:** There are confirmed reports of contact dermatitis.

**Eye Contact:** A mechanical irritant which can cause moderate to severe eye irritation.

**Ingestion:** Non-hazardous when ingested. Potentially a mild Irritant to the GI tract if excessive quantity is ingested.

**Medical Conditions Aggravated by Exposure:** Pre-existing chronic upper respiratory and lung diseases such as, but not limited to, bronchitis, emphysema and asthma. Skin disease such as dermatitis

**Carcinogenicity:** While no longer listed as a possible carcinogen by IARC, respirable glass wool fibers are classified by NTP as Group IIB, (reasonably anticipated to be a human carcinogen). Fiber glass wool is classified as a nuisance dust by OSHA.

The uncured resin contains up to 0.2 % free formaldehyde which is classified by IARC as group 2A (probably carcinogenic to humans) and by NTP as group IIB (reasonably anticipated to be a human carcinogen).

### SECTION IV - FIRST AID MEASURES

**Inhalation:** Remove to fresh air. Drink water to clear throat and blow nose to evacuate dust. If coughing and irritation develop, call a physician.

**Eye Contact:** Flush with large amounts of water until irritation subsides, as least 15 minutes. See a physician if irritation persists.

**Skin Contact:** Normal good personal hygiene practices. Wash with mild soap and warm water after each exposure.

**Ingestion:** Emergency procedures not normally required. May be a temporary irritant to the GI system.

### SECTION V - FIREFIGHTING MEASURES

**NFPA Rating:**      **Health:** 1      **Fire:** 0      **Reactivity:** 0      **Other:** 0

**Extinguishing Method:** Use water, foam, dry chemical or carbon dioxide.

**Special Firefighting Procedures:** Wear self contained breathing apparatus and protective clothing. Dense smoke may limit visibility in enclosed areas.

**Fire or explosion Hazards:** In fire conditions the binder will decompose giving off carbon monoxide, carbon dioxide, carbon particulate and traces of hydrogen cyanide from pyrolysis of the resin.

## SECTION VI - ACCIDENTAL RELEASE MEASURES

**Clean-up Procedures:** Pick up or shovel material into waste container taking care to minimize dust and fiber generation. Vacuum clean-up is preferred. If sweeping is required use a dust suppressant.

**Personal Precautions:** If dusty conditions exist, wear a face mask approved for use with dusts such as 3M 8210, N95 or equivalent.

**Environmental Precautions:** This product is not regulated under RCRA Hazardous Waste Regulations. May be disposed in landfill. Comply with federal, state and local regulations.

## SECTION VII - HANDLING AND STORAGE

**Storage Requirements:** Store in dry area. Keep area clean. Vacuum clean dust. Use a dust suppressant if sweeping is necessary.

**Special Sensitivity or Incompatibility:** Hydrofluoric acid will react with and dissolve glass.

**Handling Precautions:** Assure proper respiratory protection if dust potential exceeds PEL/TLV.

## SECTION VIII - EXPOSURE CONTROLS/PERSONAL PROTECTION

**Engineering Controls:** Maintain sufficient mechanical or natural ventilation to assure fiber concentrations remain below PEL/TLV. Use local exhaust if necessary. Power equipment should be equipped with properly designed dust collection devices.

**Respiratory Protection:** When over PEL/TLV wear an approved face mask such as 3M 8210, N95 or equivalent, to protect against respirable glass wool fibers. Concentrations of fibers that exceed the recommendations of the mask manufacturer will need a higher level of respiratory protection, such as a half mask respirator with appropriate dust filters.

**Eye Protection:** Wear safety glasses with side shields, goggles or face shield when handling, installing or fabricating to protect eyes against dust and fibers.

**Skin Protection (clothing):** Long-sleeved, loose fitting clothes and head covering are recommended. Wash work clothes separately from other clothing, towels and linens to prevent fiber migration. Rinse washer thoroughly.

## SECTION IX - PHYSICAL AND CHEMICAL PROPERTIES

**Physical Form:** White to bright yellow fibrous product, phenol formaldehyde odor. May also be black. Some products have glass or polyester woven or nonwoven mat facing.

**Melting Point:** >1300°F

**Specific Gravity:** Variable

**Solubility in Water:** Insoluble

**Pure/Mixture:** Mixture

## SECTION X - REACTIVITY

**Stability:** This is a stable, non-reactive product.

**Hazardous Decomposition Products:** Thermal decomposition of the resin may include carbon dioxide, carbon monoxide, formaldehyde, carbon particulate and traces of hydrogen cyanide.

## SECTION XI - TOXICOLOGICAL/ECOLOGICAL INFORMATION

**LD<sub>50</sub>:** N/Av

**LC<sub>50</sub>:** N/Av

**Toxicological Hazards:** See the Emergency overview on page 1, Section II.

**Ecological Hazards:** No data exists for this product.

**Teratogenicity, Mutagenicity, other Reproductive Effects:** None known

## SECTION XII - DISPOSAL CONSIDERATIONS

**Waste Disposal Method** This product is not regulated under RCRA Hazardous Waste Regulations. May be disposed in landfill. If unsure, contact the local office of the USEPA, your local public health department or the local landfill regulators.

## SECTION XIII - TRANSPORTATION INFORMATION

**US DOT Shipping Name:** Not regulated

**DOT Label:** None

**UN/NA Number:** None

## SECTION XIV - REGULATORY INFORMATION

**OSHA Status:** This product is considered hazardous under OSHA criteria.

**TSCA/CEPA Status:** All components of this product are included in the TSCA and CEPA Chemical Inventories.

**CERCLA Reportable Quantity:** N/Av

**SARA Title III:**

**Section 302 Extremely Hazardous:** This product contains no extremely hazardous substances as defined and listed in section #302.

**Section 311/312 Hazard Categories:** Reportable as a hazardous substance. Check with your Local Emergency Planning Committee for reportable quantities.

**Section 313 Toxic Chemicals:** This product does not contain substances which are reportable under Section 313.

**California Safe Drinking Water and toxic Enforcement Act (Prop. 65) Warning.** This product contains the following substance known to the state to cause cancer: Glasswool, airborne particles of respirable size.

**Canada (WHMIS):** This product is a class D2A controlled product under Canadian WHMIS regulations.

## SECTION XV - APPROVALS

**Reason for Issue:** Modify format

**Approval Date:** March 26, 2001

**Prepared by:** CCG, Inc.

**Supersedes Date:** June 30, 1999

## SECTION XVI - DISCLAIMER

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