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# MATERIAL SAFETY DATA SHEET

## Einsulation Fiberglass Pipe Insulation

**Product Name:** Einsulation Fiberglass Pipe Insulation
**Product Use:** Thermal Insulation

**Manufacturer / Supplier**
einsulation.com, inc
508 North Second Street
Fairfield, IA 52556, USA

**Phone Numbers**

**MSDS Assistance :** 1 641 472 7246
**Technical Assistance :** 1 641 472 7246
**Customer Service :** 1 641 472 7246

**Dangerous Goods Class & Subsidiary Risks :** None Allocated
**Hazchem Code :** None Allocated
**Poisons Schedule Number :** None Scheduled

**Use :** Thermal and acoustic insulation, including energy conservation. Used in homes, public and commercial buildings, warehoused, industrial plants.

**Physical Description/Properties**
**Appearance :** Yellow fibrous material. Rigid pipe insulation with aluminum backed paper facing. ,

**Boiling Point :** > 1000°C
**Melting Point :** > 1300°C
**Vapor Pressure :** Not Determined
**Specific Gravity ($H_2O$=1) :** Not Applicable
**Flashpoint :** Not Applicable
**Flammable Limits :** Not Applicable
**Solubility in Water :** Negligible
**Odor Threshold :** Usually odorless but may have faint amine odor

**Ingredients**

| Chemical Name | CAS Numbers | Proportion |
|---|---|---|
| Fiberglass wool | --- | >95% |
| Heat Cured Urea Modified Phenol-formaldehyde resin | 25104-55-6 | <5% |

**Other Properties :**
Fiberglass pipe insulation consists of fiberglass fibers. The fibres are made to target diameters of 2.5 to 3.5 microns, but may range from <1.0 to >20.0 microns. The fibres and particles are amorphous (non-crystalline). The resin binds the fibers and particles together and minimize the release of dusts. The final product contains less than 0.1% free formaldehyde and phenol. The cured resin is stable and will remain intact for the life of the product under normal atmospheric conditions.

**Health Hazard Information**
Note : Fiberglass, once installed is not a source of dust and does not cause any health effects.
Handling, installing or removing the product may result in some fiberglass, but concurrent exposure to other construction materials and general dusts will also be likely.
Users of this product are therefore advised to consider the following exposures when handling, installing or removing fiberglass.

## Health Effects

**Acute**
The known health effects of bonded fiberglass during handling, installing or removing are those of irritation due to exposure to coarse dusts (fibers and particles) greater than 3.0 micron diameter.

**Swallowed**
Unlikely under normal conditions of use, but would result in irritation of the lips, mouth and stomach.

**Eyes**
Fiberglass dust may irritate the eyes and cause watering and redness.

**Skin**
Handling fiberglass and its dust may irritate the skin resulting in itching and occasionally a red rash. The rash is not allergic and usually does not last long.

**Inhaled**
Fiberglass dust that arises during handling, installation or removal may cause irritation of the nose, throat and lungs, especially in those suffering from upper respiratory or chest complaints such as hay fever, asthma or bronchitis.

**Chronic**
Some people, particularly when working in hot conditions without skin protection or without adequate washing, may develop a persistent skin rash.

**Health Research**
Extensive research has found no long term health effects to humans from fiberglass. This research has been carried out for more than twenty years. Whilst fiberglass has not demonstrated any chronic health effect, some old European manufacturing processes have been associated with raised lung cancer mortality. Because of this, fiberglass has been evaluated by the international Agency for research on Cancer (IARC) as “Group 2B-possibly carcinogenic to humans”. Subsequently research has demonstrated that the raised lung cancer mortality was unlikely to have been due to exposure to fiberglass.

## First Aid

**Swallowed**
Rinse the lips and mouth with water, drink water, and seek medical attention

**Eyes**
Flush with flowing water for at least 15 minutes, and if symptoms/irritation persists seek medical attention.

**Skin**
Wash thoroughly with soap and running water and, if symptoms persists seek medical attention.

**Inhaled**
Remove to fresh air.

## First Aid Facilities

**Advice to Doctor**
Treat symptomatically

## Precautions for Use

**Engineering Controls**

(a) Work practices should minimize the release of, and exposure to, fibres and/or dust.

(b) Packing and transport of materials should be done so as to minimize the release of fibers and/or dust.

(c) Where possible, fiberglass should be ordered in a form and shape, which requires a minimum of cutting and handling on a site.

(d) Correct tools should be used for the task. Where required, manual tools should be used to trim or cut fiberglass. If power tools are used, these should be fitted and exhaust extraction at the point of dust generation, or other effective local exhaust ventilation supplied.

(e) Fiberglass should be stored in low traffic areas and in intact containers or under sheet covers.

(f) Work areas should be cleaned regularly to remove any build up of fibres and/or dust. Visible waste materials should be promptly to avoid being trampled and spread about.

(g) Cleaning should be by an industrial vacuum cleaner fitted with a high efficiency particular air (HEPA) filter, but wet mopping and wiping is acceptable if vacuuming is not workable.

(h) Waste should be placed in plastic bags or other containers, which prevent fiber and/or dust emission, and disposed of in accordance with the requirements of the local waste disposal authority.

(i) Designation or work areas using ropes (or similar barriers) and appropriate signs should be utilized, where workable, for all overhead work involving fiberglass. Where workable, employees not engaged in fiberglass should not be within 3 meters of the fiberglass work area.

An example of an appropriate sign is as follows :-

**FIBERGLASS WORK AREA**
**Follow Safety Instructions**

**Personal Protection**
Loose comfortable clothing should be worn. Direct skin contact should be avoided by wearing long sleeved shirts and long trousers, a cap or hat, and gloves.

People working with fiberglass should wash their skin with soap and water at the end of the work shift and at all work breaks.

Work clothes should be washed regularly and separately from other clothes.

**Eye Protection**
Ventilated non-fogging dust resistant goggles should be worn when handling fiberglass overhead or in enclosed or poorly ventilated areas such as ceiling spaces.

**Respiratory Protection**
An approved particulate respirator must be worn during all work in enclosed or poorly ventilated areas such as ceiling spaces, where evidence suggests that respirable fiber levels may exceed the exposure standard or whenever desired.

Respirators must be correctly fitted, maintained in good condition, and kept in clean storage when not in use. Replaceable filters and cartridges must be replaced regularly in accordance with the manufacturer's guidelines.

Adequate washing facilities should be available on site to wash, and to treat both skin and eye irritation. General hand washing facilities should be kept free of fibers and/or dust as far as workable.

**Flammability**
Fiberglass insulation is non-flammable, but the plastic wrapping, resin binder and some facing (e.g. calico) may decompose, smolder or burn in a fire or when heated above 300 degrees Celsius. Avoid a build up of dust and keep all storage and work areas well ventilated.

Fiberglass has a 4 zero fire rating when subjected to early fire hazard tests.

| | |
|---|---|
| Heat evolved index | (rating 0-10) 0 |
| Smoke developed index | (rating 0-10) 0 |
| Spread of flame index | (rating 0-10) 0 |
| Ignitability index | (rating 0-20) 0 |

## Safe Handling Information

**Storage and Transport**
This product should be stored in its factory packaging in low traffic areas, and in intact containers or under sheet covers.
No special transport requirements are considered necessary.

**Spills and Disposal**
Any spilt material due to accidents or off-cuts from installation should be cleaned up by either immediate bagging, the use of a vacuum cleaner fitted with a HEPA filer, or wet sweeping method. Waste should be placed into containers (e.g. plastic bags) that will not allow the product to become airborne when transported for disposal. The product should be disposed off at an approved landfill site in accordance with local authority guidelines.

**Fire/Explosion Hazard**
Not applicable because fiberglass retards the spread of fire.

**Smoking and Other Dust**
Inhalation of airborne particles from other sources in the work environment, including those from cigarette smoke, may increase the risk of the respiratory disease associated with exposure to dust from this product. It is recommended that all work and storage areas be smoke free zones and other airborne contaminants be kept to a minimum.