



Material Safety Data Sheet

2013.02.01

Section 1: PRODUCT AND COMPANY IDENTIFICATION

Manufacturer: EAS FIBERGLASS CO.,LTD
No.635, Canghai road, Jiangdong District
Ningbo-315000

Emergency Telephone Number: +86 574 81178830-875

Information Telephone Number: +86 574 81178830-810

Product Identification: Insuflex blanket

Chemical Family: Silica aerogel material

Section 2: HAZARDS IDENTIFICATION

Appearance and odor: The material is no characteristic odor. Under certain conditions, The blanket may release faint ammonia-like odor

Classification: Product is not classified as a dangerous material or preparation as defined in EC directives 67/548/EEC or 1999/45/EC. See section 11 for a full discussion of titanium dioxide.

Emergency Overview: Inhalation of excessive amounts of dust from the product may cause mechanical irritation to the respiratory tract. Dermal contact may cause mechanical irritation.

Potential healthy effects

Inhalation: Inhalation of airborne dusts may cause mechanical irritation of the upper respiratory tract.

Eye Contact: Exposure to dust from this product can produce a drying sensation and mechanical irritation of the eyes.

Skin Contact: Skin contact with dust from this product can produce a drying sensation and mechanical irritation of the skin and mucous membranes.

Skin Absorption: Material will not absorb through skin.

Ingestion: This material is not intended to be ingested (eaten). If ingested in large quantity, the material may produce mechanical irritation and blockage

Acute Health Hazards: Dust from this product is a physical irritant, and may cause temporary irritation or scratchiness of the throat and / or itching and redness of the eyes and skin.

Medical Conditions Aggravated by Exposure: Excessive inhalation of dust may aggravate pre-existing chronic lung conditions including, but not limited to, bronchitis, emphysema, and asthma. Dermal contact may aggravate existing dermatitis.

Carcinogenicity

Component	ACGIH	NTP	IARC
Titanium Dioxide	A4	Not listed	2B
Glass Fibers	A4	Not listed	3
Aluminum Trigydrate	Not listed	Not listed	None
Amorphous Silica	NA	Not listed	None

This product is composed of synthetic amorphous silica dioxide. Amorphous silica should not to be confused with crystalline silica. Epidemiological studies indicate low potential for adverse health effects from exposure to synthetic amorphous silica. See Section 11 for a full discussion of titanium dioxide.

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient	CAS number	Percent	EINECS number	EU classification
Methylsilylated Silica	68909-20-6	40-50	272-697-1	None
Fibrous glass textile grade	NA	40-50	Not assigned	None
Titanium Dioxide	1317-80-2	1-5	236-675-5	None
Aluminum Trihydrate	21645-51-2	1-5	244-492-7	None

Section 4: FIRST AID MEASURES

Eyes: Immediately wash with large amounts of water for at least 15 minutes, occasionally lifting lids. If irritation occurs and persists, get medical treatment.

Skin: Wash skin thoroughly with soap and water until clean. The soap will act as a surfactant to remove the material. Remove contaminated clothing and shoes. Wash clothing before reuse. Obtain medical attention if symptoms occur.

Inhalation: Remove to fresh air. Drink water to clear throat and blow nose to remove dust. Obtain medical attention if ill effects persist.

Ingestion: Material will pass through the body normally. Obtain medical attention if symptoms occur.

Section 5: FIRE FIGHTING MEASURES

Flammable	No
Auto ignition temperature	Not applicable
Flammability limits	Not applicable
Explosion data	Not sensitive

Extinguishing media: Use media suitable for surrounding fire and that are appropriate to the surrounding environment; normal fog nozzle water application and/or exclusion of air is typically suitable for extinguishing this product in blanket form.

Protection for fire fighters

Special Fire Fighting Procedures: Normal fire fighting procedures should be followed to avoid inhalation of smoke and gases produced by a fire.

Unusual Fire and Explosion Hazards: Product is a super-insulation material. Rolls of material can retain heat within internal layers and re-ignite combustible materials if heat is not removed

Hazardous Decomposition and/or Combustion Products: Primary combustion products are carbon monoxide and carbon dioxide. Other undetermined products could be released in small quantities.

Section 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions: Minimize dust generation. Ensure adequate ventilation. Use personal protective equipment as necessary.

Environmental Precautions: Material is not soluble. Do not flush into surface water or sanitary sewer system

Methods for Cleaning Up: Contain and collect released material for proper disposal. Dry vacuuming is the preferred method of cleaning up.

Section 7: HANDLING AND STORAGE

Handling: Aerogel blankets will generate dust when handled. Workplace exposure to all dusts should be controlled with standard industrial hygiene practices. Dry vacuuming is the preferred method for cleaning up dust. Because aerogel dust is hydrophobic, water is not effective as a dust control agent.

Storage: Aerogel blankets should be kept in their packaging until they are ready to be used. Unpack the material in the work area. This will help to minimize the area where dust exposure may occur. Trimmed material and scrap should be promptly packed in disposal bags.

Section 8: EXPOSURE CONTROLSTPERSONAL PROTECTION

Eye/Face Protection: Avoid eye contact. Wear coverall goggles, as necessary, to prevent irritation, if airborne dust or fibers are present.

Skin Protection: Wear protective clothing such as a loose fitting, long sleeved shirt that covers to the base of the neck, long pants and gloves, as necessary, to prevent irritation. Skin irritation is known to occur primarily at pressure points such as around the neck, wrist, waist and between

the fingers.

Respiratory Protection: Not ordinarily required. If sufficient dust or fibers are generated during use of the product, use a NIOSH approved dust respirator.

Ventilation: Use local exhaust sufficient to control fibers or dust generated. If exhaust ventilation is not available or is inadequate, use a NIOSH approved dust respirator.

General Hygiene Recommendations: Before eating, drinking, smoking or using toilet facilities, wash face and hands thoroughly with soap and water. Remove any contaminated clothing and laundry before reuse. Use vacuum equipment to remove fibers and dust from clothing and work areas. Compressed air is not recommended.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Opaque yellow fabric blanket; material is hydrophobic (repels water)
Odor: No characteristic odor. Under certain conditions, such as high storage temperatures, product may have faint ammonia-like odor.
Odor Threshold: Reported ammonia threshold vary widely: 0.6 to 53 ppm
pH: Not applicable.
Specific Gravity: Not applicable
Boiling Point/Range: Not applicable.
Freezing Point: Not applicable
Flash Point: Not applicable.
Flammability (solid, gas): Not applicable.
Explosive Properties: Not applicable.
Oxidizing Properties: Not applicable.
Vapor Pressure: Not applicable.
Vapor Density (air = 1) Not applicable
Solubility: Insoluble.
Viscosity: Not applicable.
Evaporation Rate: Not applicable
Coefficient of water/oil distribution

Section 10: STABILITY AND REACTIVITY

Stability: Stable

Conditions to Avoid: Prolonged exposure to temperatures above the recommended use temperature as noted in technical data sheet. Avoid conditions that produce large quantities of dust dispersed in air.

Materials to Avoid: Avoid strong acids and bases.

Hazardous Decomposition Products: Under recommended usage conditions, hazardous decomposition products are not expected. Hazardous decomposition products, including carbon monoxide and other productions of combustion, may occur as a result of oxidation, heating or reaction with another material.

Section 11: TOXICOLOGICAL INFORMATION

Dust may cause mechanical irritation and dryness to eyes and skin.

Synthetic Amorphous Silica

Oral LD50: >5,000 mg/kg

Inhalation LC50: >2,000 mg/m³

Dermal LD50: >3,000 mg/kg

Eye Irritation: Synthetic amorphous silica and silicates are not irritating to skin and eyes under experimental conditions, but may produce dryness following prolonged and repeated exposure. **Skin Irritation:** Synthetic amorphous silica and silicates are not irritating to skin and eyes under experimental conditions, but may produce dryness following prolonged and repeated exposure.

Titanium Dioxide

Oral LD50: >5,000 mg/kg

Inhalation LC50: >6,820 mg/m³ (ALC/4 hour rat)

Dermal LD50: >10,000 mg/kg (rabbit)

Eye Irritation: Slight irritation

Skin Irritation: Slight irritation

Aluminum Trihydrate

Oral LD50: >5,000 mg/kg (rat)

Eye Irritation: Slightly irritating

Skin Irritation: Non-irritating

Section 12: ECOLOGICAL INFORMATION

Aquatic Toxicity

Synthetic Amorphous Silica Fish: LC50 > 10,000 mg/L (Brachydanio rerio: 96 hour), Method OECD 203

Daphnia magna: EC50 > 10,000 mg/l (24 hours), Method OECD 202

Titanium Dioxide Fish: LC50 > 1,000 mg/L (fathead minnow 96 hour)

Aluminum Trihydrate Fish: LC50 > 10,000 mg/L

Mobility: None expected due to insoluble nature of product.

Persistence and Biodegradability: Not applicable for inorganic material.

Bioaccumulative Potential: None expected due to insoluble nature of product.

Other Adverse Effects: None expected.

Section 13: DISPOSAL CONSIDERATIONS

Waste Disposal Methods: Material for disposal should be placed in appropriate sealed containers to avoid potential human and environmental exposure. It is the responsibility of the generator to comply with all federal, state, provincial and local laws and regulations. We recommend that you contact an appropriate waste disposal contractor and environmental agency for relevant laws and regulations. Under the US, Resource Conservation and Recovery Act (RCRA), it is the responsibility of the user of the product to determine at the time of disposal, whether the product meets relevant waste classification and to assure proper disposal.

Section 14: TRANSPORT INFORMATION

DOT:

Proper Shipping Name	Not regulated
Hazard Class	Not regulated
Identification Number	Not regulated
Packing Group	Not regulated
Label Required	None

Explanation And Disclaimer: Wherever such words or phrases as “hazardous,” “toxic,” “carcinogen,” etc. appear herein, they are used as defined or described under state employee right-to-know laws, Federal OSHA laws or the direct sources for these laws such as the International Agency for Research on Cancer (IARC), the National Toxicology Program (NTP), etc. The use of such words or phrases should not be taken to mean that we deem or imply any substance or exposure to be toxic, hazardous or otherwise harmful. **Any exposure can only be understood within the entire context of its occurrence, which includes such factors as the substance’s characteristics as defined in the MSDS, amount and duration of exposures, other chemicals present and preexisting individual differences in response to the exposure.**

The data provided in this MSDS is based on the information received from our raw material suppliers and other sources believed to be reliable. We are supplying you this data solely in compliance with the Federal OSHA Hazard Communication Standard, 29 CFR 1910.1200 and other Federal and state laws as described in Section 15: Regulatory Information. The information contained in this MSDS is proprietary and confidential to Hexcel Corporation. This MSDS and the information in it are not to be used for purposes other than compliance with the Federal OSHA Hazard Communication Standard.

Liability, if any, for use of this product is limited to the terms contained in our sale terms and conditions. We do not in any way warrant (expressed or implied, including any implied warranty for merchantability or fitness for a particular purpose) the data contained or the product described in this MSDS. Additionally, we do not warrant that the product will not infringe any patent or other proprietary or property rights of others.