

Fiberglass Safety Data Sheet

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

- Fiberglass

1.2 Relevant identified uses of the substance or mixture and uses advised against

- Structural reinforcement for thermoset resin products.

1.3 Details of the supplier of the safety data sheet

- NOV Fiber Glass Systems
17115 San Pedro Avenue, Suite 200
San Antonio, Texas 78232 USA
Tel: 1-210-477-7500
Fax: 1-210-231-5915
E-mail: Mike.Thayer@nov.com

1.4 Emergency telephone number(s)

- 3E Company, 24-Hour Support (Access Code/Contract Number: 333386)
 - USA, Canada 1-888-298-2344
 - Asia, Pacific 1-760-476-3960
 - Europe, Middle East, Africa 1-760-476-3961
 - Americas 1-760-476-3962

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Physical

- Not classified

Health

- Skin irritation, Category 2
- Eye irritation – Category 2
- Specific target organ systemic toxicity – single exposure, Category 3 (respiratory tract irritation)

Environmental

- Not classified

2.2 Label elements

Signal Word(s)

- WARNING

Pictogram(s)



Hazard Statements

- Physical
 - Not classified
- Health
 - H315: Causes skin irritation.
 - H319: Causes serious eye irritation.
 - H335: May cause respiratory irritation.
- Environmental
 - Not classified.

Precautionary Statements

- Prevention
 - P271: Use only outdoors or in well-ventilated area.
 - P280: Wear protective gloves/protective clothing/eye protection/face protection.
- Response
 - P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- Storage
 - No special instructions.
- Disposal
 - P501: Dispose of contents/container in accordance with regulatory requirements.

2.3 Other Hazards

- PBT and vPvB assessment
 - None of the ingredients are considered to be either PBT or vPvB.

SECTION 3: Composition/information on Ingredients

3.1 Substances

- Not applicable

3.2 Mixtures

| Chemical Identity | CAS No. | EC No. | Concentration Range (weight %) |
|------------------------------------|---------------|---------------|--------------------------------|
| Fibrous glass, continuous filament | 065997-17-3 | 266-046-0 | > 95 |
| Organic surface binder/sizing | Not available | Not available | < 5 |

SECTION 4. First-aid measures

4.1 Description of first-aid measures

Inhalation

- Move to fresh air.
- If difficulty in breathing or respiratory irritation; seek immediate medical attention.
- If breathing has stopped; seek immediate medical attention, perform artificial respiration.

Skin contact

- Remove contaminated clothing.
- Gently wash with plenty of soap and water.
- If irritation develops or persists or if product becomes imbedded in skin; seek medical attention.

Eye contact

- Remove contact lenses, if present.
- Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open.
- If irritation develops or persists, seek medical attention.

Ingestion

- If swallowed and conscious, rinse mouth with water (never give anything by mouth to an unconscious person).
- If symptoms persist, seek immediate medical attention.

4.2 Most Important symptoms and effects, both acute and delayed

Acute

- Dusts may cause temporary mechanical irritation to the eyes, skin, and respiratory tract. Accidental ingestion may cause illness or irritation to the mouth and gastrointestinal tract.

Delayed

- No specific data available.

4.3 Indication of any immediate medical attention and special treatment needed

- Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

- Use an extinguishing media suitable for the surrounding fire.

5.2 Specific hazards arising from the substance or mixture

- No specific fire or explosion hazards.

5.3 Advice for firefighters

- Wear self-contained breathing apparatus and protective clothing, as necessary.
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SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

- Wear appropriate personal protective equipment and clothing to reduce or eliminate contact.

6.2 Environmental precautions

- Fiberglass is generally considered to be an inert solid; no special precautions identified.

6.3 Methods and materials for containment and cleaning up

- Collect spilled material by vacuum or sweeping and place into suitable container for disposal

6.4 Reference to other sections

- See also, *SECTION 8: Control parameters* and *SECTION 13: Disposal considerations*.
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SECTION 7: Handling and storage

7.1 Precautions for safe handling

- Wear appropriate personal protective equipment.
- Avoid eating, drinking, and smoking in areas where this material is handled, stored, and processed.
- Wash face and hands before eating, drinking, and smoking after handling this product.

7.2 Conditions for safe storage, including any incompatibilities

- No specific data available.

7.3 Specific end use(s)

- No additional data available.
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SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Glass Fiber (continuous filament glass fibers)
CAS No. 065997-17-3

| Country | Occupational Exposure Limit (OEL) Values | | Legal Basis |
|---------------------------|--|--|--|
| | Eight Hour TWA | Fifteen Minute STEL | |
| Australia | 2 mg/m ³ (inhalable dust) | None established | Workplace Exposure Standards for Airborne Contaminants |
| Canada – British Columbia | 1 fiber/cc | None established | Occupational Health and Safety Regulation, Table of Exposure Limits for Chemical and Biological Substances |
| Canada - Ontario | 1 fiber/cc | None established | Regulation 883, Control of Exposure to Biological or Chemical Agents |
| Canada - Manitoba | 1 fiber/cc | None established | Workplace Safety and Health Act, Part 36 |
| Canada - Quebec | 1 fiber/cc | None established | Regulation respecting occupational safety and health |
| Canada - Saskatchewan | 1 fiber/cc (respirable fibers) 5 mg/m ³ (inhalable fraction) | 3 fibers/cc (respirable fibers) 10 mg/m ³ (inhalable fraction) | The Occupational Safety and Health Regulations |
| New Zealand | 1 fiber/cc | None established | Workplace Exposure Standards and Biological Exposure Indices |
| Singapore | 10 mg/m ³ (fibrous glass dust) | None established | Workplace Safety and Health (General Provisions) Regulations |
| USA (ACGIH) | 1 fiber/cc | None established | None |
| USA (NIOSH) | 3 fiber/cc | None established | NIOSH Pocket Guide to Chemical Hazards (Recommendations Only) |

Particulates not otherwise classified/regulated (PNOC / PNOR) (may be generated if cured product is subjected to sanding, grinding, cutting, etc.)

CAS No. – Not applicable

| Country | Occupational Exposure Limit (OEL) Values | | Legal Basis |
|---------------------------|---|---------------------|--|
| | Eight Hour TWA | Fifteen Minute STEL | |
| Austria | 10 mg/m ³ (inhalable) | None established | Workplace Exposure Standards for Airborne Contaminants |
| Belgium | 10 mg/m ³ | None established | limites d'exposition professionnelle – VLEP/ Grenswaarden voor beroepsmatige blootstelling – GWBB |
| Canada - Alberta | 10 mg/m ³ (total) 3 mg/m ³ (respirable) | None established | Occupational Safety and Health Code |
| Canada – British Columbia | 10 mg/m ³ (total dust) 3 mg/m ³ (respirable) | None established | Occupational Health and Safety Regulation, Table of Exposure Limits for Chemical and Biological Substances |
| Canada - Manitoba | 10 mg/m ³ (inhalable) 3 mg/m ³ (respirable) | None established | Workplace Safety and Health Act, Part 36 |
| Canada - Ontario | 10 mg/m ³ (inhalable) 3 mg/m ³ (respirable) | None established | Regulation 883, Control of Exposure to Biological or Chemical Agents |

| | | | |
|-----------------|---|------------------|---|
| Canada - Quebec | 10 mg/m ³ (total dust) | None established | Regulation respecting occupational safety and health |
| China | 3 mg/m ³ (fiberglass reinforced plastic dust) | None established | GBZ 2.1-2007, Occupational exposure limits for hazardous agents in the workplace |
| Ireland | 10 mg/m ³ (inhalable) 4 mg/m ³ (respirable) | None established | Code of Practice for the Safety, Health and Welfare at Work (Chemical Agents) Regulations |
| Malaysia | 10 mg/m ³ (inhalable) 3 mg/m ³ (respirable) | None established | Occupational Safety and Health (Use and Standards of Exposure of Chemicals Hazardous to Health) Regulations |
| New Zealand | 10 mg/m ³ (inhalable) 3 mg/m ³ (respirable) | None established | Workplace Exposure Standards and Biological Exposure Indices |
| Singapore | 10 mg/m ³ (nuisance) | None established | Workplace Safety and Health (General Provisions) Regulations |
| South Korea | 10 mg/m ³ | None established | [Need reference] |
| USA (ACGIH) | 10 mg/m ³ (inhalable) 3 mg/m ³ (respirable) | None established | None |
| USA (OSHA) | 15 mg/m ³ (total dust) 5 mg/m ³ (respirable) | None established | 29 CFR 1910 Subpart Z, Toxic and Hazardous Substances |
| United Kingdom | 10 mg/m ³ (inhalable) 4 mg/m ³ (respirable) | None established | EH40 Workplace exposure limits |

8.2 Exposure controls

Appropriate engineering controls

- Provide adequate general and local exhaust ventilation to control airborne concentrations to below the occupational exposure limit values.

Personal protective equipment

- Eye and face protection
 - Approved safety glasses with side shields (e.g., ANSI Z87, EN166)
- Skin protection
 - Hand protection: Butyl rubber, Nitrile rubber or Neoprene gloves. Different glove materials, thicknesses, and from different glove manufacturers may provide varying degrees of protection. Temperature and specific use can impact glove effectiveness. Some gloves may be intended to be used only once and then discarded, while others may be used for longer periods of time. The glove supplier should provide the user with information regarding permeability and breakthrough time. Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.
 - Other skin protection: Such clothing as to minimize or eliminate the chance of skin contact.
- Respiratory protection
 - If ventilation is insufficient to keep airborne concentrations below the occupation exposure limit levels, full or half-mask respirator fitted with particulate filters. Filter masks may be of limited use in cases of high or unknown exposure.

Environmental exposure controls

- Do not flush into surface water or sanitary sewer system.
- Do not place directly onto ground.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

| | |
|--|--------------------------------------|
| - Appearance | White to yellowish solid |
| - Odor | None |
| - Odor threshold | No data available |
| - pH | No data available |
| - Melting point/freezing point | > 800°C (1472°F) / No data available |
| - Initial boiling point and boiling range | No data available |
| - Flash point | Not applicable |
| - Evaporation rate | No data available |
| - Flammability (solid, gas) | No data available |
| - Upper/lower flammability or explosive limits | Not applicable |
| - Vapor pressure | No data available |
| - Vapor density (air = 1) | No data available |
| - Relative density | 2.4 – 2.7 |
| - Solubility(ies) | Insoluble |
| - Partition coefficient: n-octanol/water | No data available |
| - Auto-ignition temperature | No data available |
| - Decomposition temperature | No data available |
| - Viscosity | Not applicable |
| - Explosive properties | No data available |
| - Oxidizing properties | No data available |

9.2 Other information

- No data available.

SECTION 10: Stability and reactivity

10.1 Reactivity

- No data available.

10.2 Chemical stability

- Product is stable.

10.3 Possibility of hazardous reactions

- Under normal conditions of storage and use, hazardous reactions will not occur..

10.4 Conditions to avoid

- Excessive heat and flames.

10.5 Incompatible materials

- None known.

10.6 Hazardous decomposition products

- Fiberglass products may release small amounts of acetic acid and other organic materials at elevated temperatures.
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SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

- Data for ingredients were not found or not sufficient for classification.

Skin corrosion/irritation

- Data for ingredients were not found or not sufficient for classification.

Serious eye damage/irritation

- Data for ingredients were not found or not sufficient for classification.

Respiratory or skin sensitization

- Data for ingredients were not found or not sufficient for classification.

Germ cell mutagenicity

- Data for ingredients were not found or not sufficient for classification.

Carcinogenicity

- Data for ingredients were not found or not sufficient for classification.

Reproductive toxicity

- Data for ingredients were not found or not sufficient for classification.

STOT-single exposures

- Respiratory system Irritation

STOT-repeated exposures

- Data for ingredients were not found or not sufficient for classification.

Aspiration hazard

- Data for ingredients were not found or not sufficient for classification.
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SECTION 12: Ecological information

12.1 Toxicity

Acute toxicity

- Data for ingredients were not found or not sufficient for classification.

Chronic toxicity

- Data for ingredients were not found or not sufficient for classification.

12.2 Persistence and degradability

- Data for ingredients were not found or not sufficient for classification.

12.3 Bioaccumulative potential

- Data for ingredients were not found or not sufficient for classification.

12.4 Mobility in soil

- Data for ingredients were not found or insufficient for classification.

12.5 Results of PBT and vPvB assessment

- None of the ingredients are listed.

12.6 Other adverse effects

- No additional data is available.
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SECTION 13: Disposal considerations

13.1 Waste treatment methods

- Must be disposed of in accordance with local regulatory requirements.
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SECTION 14: Transport information

- The transport information provided below conforms to the following:
 - UN Model Regulations
 - International Carriage of Dangerous Goods by Road (ADR)
 - International Carriage of Dangerous Goods by Rail (RID)
 - International Carriage of Dangerous Goods by Inland Waterways (ADN)
 - International Maritime Dangerous Goods (IMDG) Code
 - International Civil Aviation Organization (ICAO) Technical Instructions for the Safe Transport of Dangerous Goods by Air

If offered alone, the classification is as described below

| | |
|--|---|
| 14.1 UN number | None |
| 14.2 UN proper shipping name | Not regulated |
| 14.3 Transport hazard class(es) | None |
| 14.4 Packing group | None |
| 14.5 Environmental hazards | None |
| 14.6 Special precautions for user | None |
| 14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code | Product is not offered nor intended to be transported in bulk quantities. |

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

The regulatory information provided below may not be comprehensive.

Canada

Controlled Products Regulation (CPR)

- This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR.

Ingredient Disclosure List (IDL)

- All components of this mixture that are on the IDL above their specified concentration are disclosed in this SDS.

United States

| EPCRA | | | CERCLA | RCRA | CAA | OSHA |
|------------------------------------|------------------------|-------------|------------|-----------|-------------------|---------------------------|
| Section 302 (EHS) TPQ (LB/KG) | Section 304 RQ (LB/KG) | Section 313 | RQ (LB/KG) | P/U Codes | 112(r) TQ (LB/KG) | Highly Hazardous Chemical |
| None of the ingredients are listed | | | | | | |

15.2 Chemical safety assessment

- No chemical safety assessment has been carried out for this mixture by the supplier.
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SECTION 16: Other information

Revision history

| Revision Number | Revision Date | Revision Description |
|-----------------|---------------|---|
| 1 | 25-AUG-2013 | Initial SDS creation in conformance with OSHA hazard communication standard (29 CFR 1910.1200), Regulation (EC) No. 1907/2006 (REACH), and UN Globally Harmonized System (GHS). |

Legend to abbreviations and acronyms used

- ACGIH American Conference of Governmental Industrial Hygienists
- ANSI American National Standards Institute
- CAA Clean Air Act
- cP centipoise
- CFR Code of Federal Regulations (US)
- EPCRA Emergency Planning and Community Right-to-Know Act
- IARC International Agency for Research on Cancer
- IBC Code International Bulk Chemical Code
- MARPOL Marine Pollution
- NIOSH National Institute for Occupational Safety and Health
- NTP National Toxicological Program
- OSHA Occupational Safety and Health Administration (US)
- PBT Persistent Bioaccumulative and Toxic
- RCRA Resource Conservation and Recovery Act
- vPvB very Persistent and very Bioaccumulative

Key literature references and sources for data

- ESIS. European chemical Substances Information System. <http://esis.jrc.ec.europa.eu/>.
- USEPA. 2006. List of Lists, Consolidated List of Chemicals Subject to the Emergency Planning and Community Right-To-Know Act (EPCRA) and Section 112(r) of the Clean Air Act. EPA 550-B-01-003. October 2006.