



Material Safety Data Sheet

Section 1. Chemical Product and Company Identification

Product Name(s): FibaFuse™ Paperless Wall Reinforcement

Manufacturer's Name:

Saint-Gobain Technical Fabrics, (Vetrotex) Americas Inc.

Emergency Telephone Number:

Chemtrec: 1-800-424-9300

Contact Number:

Russellville plant: 1-(256)-332-9020
475 Walnut Gate Rd.
Russellville,
AL 35654. U.S.A.

Charleston plant: 1-(843)-744-7451
2900 Bird St.
Charleston Heights,
SC 29405. USA
Saint-Gobain EH&S: 1-(310)-641-7505

Date Prepared: April 20, 2009 **Date of Expiration:** April 20, 2012

Section 2. Composition / Information on Ingredients

FibaFuse is produced with continuous glass filaments. Dust may be generated by mechanical processing or abrading of the product.

CAS No.	Component	Wt. %
65997-17-3	Continuous filaments glass fibers	70 - 90
Not available	Urea, polymer with Formaldehyde (Modified, Cured)	10 - 30
Not Available	Styrene-Butadiene Acrylate Copolymer	0 - 5
50-00-0	Formaldehyde	<0.1
Not Available	Sizing	<0.1

Component Related Regulatory Information: This product contains or may generate (during handling and process) the following components that may be regulated, have exposure limits or other information identified: Nuisance particulates, Fibrous glass and Glass filaments.

EMERGENCY OVERVIEW

Section 3. Hazards Identification

EYES: May cause eye irritation, itching or redness when dust is generated or through direct contact with dust or glass fibers.

INHALATION: Dusts particles and glass fibers can be inhaled; i.e. able to be breathed in the upper respiratory tract causing mechanical irritation of the mouth, nose and throat. And coughing and congestion may occur.



The essential point to remember is that glass filaments are not “respirable” as they are over 3 µm in diameter and have been shown not to cause lung cancer.

SKIN: May cause short term irritation, itching and redness.

INGESTION: Ingestion may cause temporary irritation of the digestive tract. If symptoms persist consult a physician.

Allergies in rare instances.

Section 4. First Aid Measures

INHALATION: Glass fibers may cause mechanical irritation to the mouth, nose and throat. Remove the person to fresh air. If symptoms persist, consult a physician.

EYE CONTACT: Flush eyes with large amounts of water for at least 15 min. Do not rub or scratch eyes. If irritation persists, consult a physician

SKIN CONTACT: Wash with mild soap and running water without excessive rubbing. Wash hands before eating or using the restroom. Don’t use compressed air to remove fibers from the skin. If irritation persists, consult a physician.

INGESTION: Unlikely to occur. If symptoms persist consult a physician.

NOTE TO PHYSICIAN: No special instructions at normal conditions. Under high heat or humidity may release irritating formaldehyde gas that is skin and respiratory sensitizer.

Section 5. Firefighting Information

FLASH POINT: -Not applicable (**METHOD USED:** -Not applicable)

FLAMMABLE LIMITS: -Not applicable

LOWER FLAMMABLE: -Not applicable (**UPPER FLAMMABLE:** -Not applicable)

EXTINGUISHING MEDIA: -Water, water spray, foam, carbon dioxide, dry chemical

FIRE & EXPLOSION HAZARD -There is no potential for spontaneous fire or explosion.

FIRE FIGHTING INSTRUCTIONS: -Thermal decomposition of fabric coating may cause irritating smoke and fumes.

FIRE FIGHTING EQUIPMENT: -Fire fighters should wear appropriate self contained breathing apparatus and impervious protective clothing. And avoid inhaling any combustion products.

PRODUCT STATUS: -In case of fire, glass fibers are not flammable, are incombustible and don’t support combustion. Only the packaging (plastic film, paper, cardboard, wood) is likely to burn. Binders and sizing can be combustible.

HAZARDOUS COMBUSTION PRODUCTS: -Combustion gases are basically carbon dioxide and water vapor. There may be carbon monoxide, nitrogen oxides and small quantities of other unknown substances.

Section 6. Accidental Release Measures

CONTAINMENT PROCEDURES: -This material settles out of the air. On land pick up large pieces and clean up the small pieces and dusts with a vacuum or by a wet sweeping technique. Do not use compressed air.

CLEAN-UP PROCEDURES: -Avoid generation of dust during clean-up. All waste and scrap material should be disposed of in accordance with applicable national, federal, state and local regulations.

RESPONSE PROCEDURES: -Isolate the containment area.

SPECIAL PROCEDURES: -None

Section 7. Handling and Storage

HANDLING PROCEDURES: -Use this product only with adequate ventilation. Avoid eye and excessive skin contact: wear gloves, garments with long sleeves and long leggings or protective overalls, goggles and dust masks. Glass filaments and dusts must be removed from work garments with a vacuum cleaner and not blown off with compressed air jets. Wash work garments separately from other clothes. Avoid inhaling dusts or vapors produced during handling and processing, avoid dusts build up.

STORAGE PROCEDURES: -Store in a dry place with adequate ventilation and avoid direct sunlight. Under elevated temperature and high humidity, formaldehyde may be released and accumulated in poorly ventilated areas. OSHA requires companies where the concentration of airborne formaldehyde exceeds the TWA or the STEL, to establish regulated areas and post all entrances and access ways with signs bearing the following information as: “DANGER, FORMALDEHYDE IRRITANT AND POTENTIAL CANCER HAZARD, AUTHORIZED PERSONNEL ONLY.”

Section 8. Exposure Controls / Personal Protective Equipment

EXPOSURE GUIDELINES:

A: General Product

Information: Continuous filament glass fibers contained in the glass mat are not respirable. If continuous filament glass products are severely chopped, crushed or processed, it may generate very small amount of respirable particulate, some of which may be glass shards.

B: Component Exposure limits

Fiber Glass Continuous (non-respirable) (CAS No. 65997-17-3)

ACGIH: 1 fiber/cm³ TWA (for respirable fibers longer than 5 µm with a diameter less than 3 µm); 5 mg/m³ TWA (inhalable particulate); (Listed under "Synthetic vitreous fibers") (related to continuous filament glass fibers)

OSHA: total dust 15 mg/m³ TWA; respirable fraction: 5 mg/m³ TWA (related to Particulates not otherwise regulated)

Formaldehyde (CAS No. 50-00-0)

ACGIH: C 0.3 ppm

OSHA: 0.75 ppm TWA PEL; 2 ppm STEL; 0.5ppm TWA action level; Irritant and potential cancer hazard (29 CFR 1910.1048)

PERSONAL PROTECTIVE EQUIPMENT:

Respiratory Protection: A properly fitted NIOSH (American National Institute For Occupational Safety And Health) approved disposable N 95 series dust respirator such as type 3M 8210 (formerly 8710) or 3M 8271 (formerly 9900) respirators should be used under any dust environment or during a process that generates dusts. Use respiratory protection in accordance with the respiratory protection program of your company, local regulations and OSHA regulations under 29 CFR 1910.134.

Skin Protection: Wear protective cotton or leather gloves for hands. And wear long-sleeved garments and long leggings to prevent irritation and nuisance dust. Barrier cream may also be applied to exposed skin areas, especially for people with delicate skin.

Eyes/Face Protection: Wear approved safety glasses with side-shields or goggles, masks to minimize eye and face contact.

Ears Protection: Use earplugs, hood, or earmuffs to prevent airborne dust or fibers if necessary.

Work Practices: Avoid generating dusts. Use good industrial hygiene and safety practices to handle glass mat. Avoid unnecessary contact with dusts and fibers by using good local ventilation and keeping the work area clean of dusts and fibers. Use vacuum equipment or wet sweeping technique to clean up the small pieces, glass fibers and dusts. Do not use compressed air or dry sweeping to clean work area or your clothes or your skin.

Ventilation: Use general dilution ventilation and/or local exhaust ventilation to maintain exposures below occupational exposure limits. If ventilation is unavailable or inadequate, for keeping formaldehyde, dust and fiber levels below the applicable exposure limits, need to use suitable respirator in accordance with your company, local regulations and OSHA regulations.

Section 9. Physical and Chemical Properties

APPEARANCE: White to yellow fiberglass mat

PHYSICAL STATE: Solid

FORM: Glass mat rolls or strips

ODOR: None or mild chemical or formaldehyde

BOILING POINT: Not applicable

SOLUBILITY IN WATER: In soluble

MELTING POINT: E glass softening point (Littleton point) at 850 °C, melting point range 1200 -1250 °C. Other glass may slight lower than these points.

SPECIFIC GRAVITY: Depending on glass strands and binder rates (2.6 or 2.7 g/ cm³ for glass, 0.9 to 1.2 g/ cm³ for cured binder)

FREEZING POINT: Not applicable

VAPOR DENSITY: Not applicable
EVAPORATION RATE: Not applicable
VAPOR PRESSURE: Not applicable
MOLECULAR WEIGHT Not applicable **VISCOSITY** Not applicable
ODOR: Not applicable % **VOLATILE** Non Volatile
pH: Not applicable
STATIC CHARGE: Can build Static Charge

Section 10. Stability and Reactivity

CHEMICAL STABILITY: This product is stable under the recommended storage conditions. Binder starts to decompose at 230 °C to 250 °C.

INCOMPATIBILITY: Avoid strong oxidizers. Should be store and used in a dry area.

HAZARDOUS DECOMPOSITION PRODUCTS: In combustion conditions, in addition to water vapor and carbon dioxide, less amount carbon monoxide, nitrogen oxides, carbon particles, formaldehyde gas as well as other undetermined small quantity compounds may be released.

HAZARDOUS POLYMERIZATION: Will not occur.

Section 11. Toxicological Information

ACUTE TOXICITY:

A: General Product Information: Dusts and fibers from this product may cause mechanical irritation or scratchiness to eyes, skin and throat. Inhalation and ingestion may cause coughing, irritation to nose and throat, stomach and gastrointestinal tract, and sneezing. Formaldehyde can be released under high heat and humidity conditions may cause severe eye and respiratory irritation. Higher exposures may cause difficulty breathing, congestion, and chest tightness. The National Toxicology Program (NTP) includes formaldehyde in its Annual Report on Carcinogens. OSHA requires companies where the concentration of airborne formaldehyde exceeds the TWA or the STEL, to establish regulated areas and post all entrances and access ways with signs bearing the following information as: **“DANGER, FORMALDEHYDE IRRITANT AND POTENTIAL CANCER HAZARD, AUTHORIZED PERSONNEL ONLY.”**

B: Component Analysis – LD50/LC50

Urea, polymer with formaldehyde:

Inhalation LC50 Rat: >167 mg/ m³/4H

Oral LD50 Rat: 8394 mg/kg

Oral LD50 Mouse: 6361 mg/kg

Formaldehyde (50-00-0):

Inhalation LC50 Rat: 0.578 mg/L/4H

Inhalation LC50 Rat: 250 ppm/4H

Oral LD50 Rat: 100 mg/kg

Dermal LD50 Rabbit: 270 mg/kg

CARCINOGENICITY:

A: General Product Information

Fiber Glass Continuous Filament: The American Conference of Governmental Industrial Hygienists (ACGIH) A4 classification, not classifiable as a human carcinogen, for respirable continuous filament glass fibers is based on inadequate data in terms of its carcinogenicity in humans and/or animals. A TLV-TWA of 1 fiber/cm³ was adopted to protect workers against mechanical irritation. The TLV-TWA of 5 mg/ m³ was adopted for non-respirable glass filament fiber, measured as inhalable dust, to prevent mechanical irritation of the upper respiratory tract.

Formaldehyde: The International Agency for Research on Cancer (IARC) classifies formaldehyde as a carcinogen. This classification is based on the increased occurrence of a rare cancer of the nasopharyngeal cavity. IARC determined that there was insufficient evidence of other cancers including cancer of the oral cavity, oro- and hypopharynx, larynx, lung, sinonasal cavity, pancreas, brain and leukemia. The National Toxicology Program (NTP) includes formaldehyde in its Annual Report on Carcinogens. OSHA requires



companies where the concentration of airborne formaldehyde exceeds the TWA or the STEL, to establish regulated areas and post all entrances and access ways with signs bearing the following information as: "DANGER, FORMALDEHYDE IRRITANT AND POTENTIAL CANCER HAZARD, AUTHORIZED PERSONNEL ONLY."

B: Component Carcinogenicity

Fiber Glass Continuous Filament:

ACGIH: A4 – Not Classifiable as a Human Carcinogen

IARC: Group 3 – Not Classifiable (IARC Monograph 81 [2002] (listed under Man-made mineral fibers), Monograph 43 [1988])

Formaldehyde (CAS No. 50-00-0)

ACGIH: A2 – suspected human carcinogen

OSHA: 0.75 ppm TWA; 0.5 ppm Action Level; 2 ppm STEL (Irritant and potential cancer hazard – see 29 CFR 1910.1048)

NTP: Reasonable Anticipated To BE A Carcinogen (Possible Select Carcinogen)

IARC: Group 1 – Known Human Carcinogen (IARC Monograph 88 in preparation, Monograph 62 [1995], Supplement 7 [1987])

CHRONIC TOXICITY:

Continuous Filament Glass Fiber: No chronic health effects associate with exposure to continuous filament fiberglass. Epidemiologic studies have not indicated any increases in cancer or respiratory disease. The glass fibers used in glass mat have large diameter, and because of this they are not considered respirable.

Formaldehyde gas: Under high heat or humidity conditions glass mat can release formaldehyde gas causing eye and respiratory irritation, and possible skin or respiratory sensitization. Formaldehyde gas may worsen asthma or other respiratory problems and cause allergic-type reactions. The International Agency for Research on cancer (IARC) has classified formaldehyde as Group 1, a known human carcinogen. The US Occupational Safety and Health Administration (OSHA) and the US National toxicology Program (NTP) considers formaldehyde to have carcinogenic potential. OSHA regulates formaldehyde under 29 CFR 1910.1048.

Section 12. Ecological Information

ECOTOXICITY:

A: General Product Information No data available for this product. This material is not known to cause harm to animals, plants or fish.

B: Component Analysis – Ecotoxicity – Aquatic Toxicity

Formaldehyde (CAS No. 50-00-0): LC50 (96 hr) fathead minnow: 24.1 mg/L. Cond: flow-through, 21.7 degree C, pH 6.8, 50.8 mg/L CaCO₃; LC50 (96 hr) bluegill: 0.10 mg/L. Cond: flow-through.

ENVIRONMENTAL FATE: No data available for this product.

Section 13. Disposal Considerations

US EPA WASTE NUMBER & DESCRIPTIONS

A: General Product Information: Comply with state and local regulations for disposal. Contact you're your local Public Health Department or the local office of the EPA to know regulations.

B: Component Waste Numbers No EPA Waste Numbers are applicable for this product's components.

DISPOSAL INSTRUCTIONS: Dispose of waste material according to Local, State, Federal and Provincial, National Environmental Regulations.

Section 14. Transport Information

INTERNATIONAL TRANSPORTATION REGULATIONS: This product is not classified as a hazardous material for transport.

Mineral Wool Batts Batting or Blankets.



Plain or Saturated
2299918001

US DOT INFORMATION:

Shipping Name: Not regulated for transport
Hazard Class: None
UN/NA # None
Packing Group: None
Required Label(s): None
Additional Information: None

CANADA TDG INFORMATION:

Shipping Name: Not regulated for transport
Hazard Class: None
UN/NA # : None
Packing Group: None
Required Label(s): None
Additional Information: None

Section 15. Regulatory Information- Not meant to be all inclusive - selected regulation

US FEDERAL REGULATIONS

A: General Product Information SARA 311 Status: Immediate (acute) health hazard. Delayed (chronic) health hazard.

B: Component Analysis

This material contains one or more of the following chemicals required to be identified under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65) and/or CERCLA (40 CFR 302.4).

Formaldehyde (CAS No. 50-00-0)

SARA 302: TPQ = 500 pound; RQ = 100 pounds (does not meet toxicity criteria but because of high production volume and recognized toxicity is considered a chemical of concern)

SARA 313: Form R reporting required for 0.1% de minimis concentration

CERCLA: Final RQ = 100 pounds (45.4 kg)

SARA 311/312

Acute Health Hazard: Yes
 Chronic Health Hazard: Yes
 Fire Hazard: No
 Sudden Release of Pressure Hazard: No
 Reactive Hazard: No

C: CLEAN AIR ACT

The following components appear on the Clean Air Act – 1990 Hazardous Air Pollutants List.

Component	CAS No.	CAA
Formaldehyde	50-00-0	Yes

STATE REGULATIONS

A: General Product Information: Other State regulations may apply. Check individual state requirements.

B: Component Analysis – State: The following components on one or more of state hazardous substances list:

Component	CAS No.	CA	FL	MA	MN	NJ	PA
Continuous filament glass fibers	N/A	Yes	No	Yes	Yes	No	Yes
Formaldehyde	50-00-0	Yes	No	Yes	Yes	Yes	Yes



The following statement(s) are provided under the California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): WARNING! This product contains a chemical known to the state of California to cause cancer.

Component	CAS No.
formaldehyde	50-00-0

OTHER REGULATIONS

A: General Product Information: No information available for this product.



B: Component Analysis - Inventory

Component	CAS No	TSCA	DSL	EINECS
Fiber Glass Continuous	N/A	Yes	Yes	Yes
Urea, polymer with Formaldehyde	N/A	Yes	Yes	No
Formaldehyde	50-00-0	Yes	Yes	Yes

C: Component Analysis – WHMIS IDL: The following components are identified under the Canadian Hazardous Products Act Ingredient Disclosure List

Component	CAS No	
Fiberglass Continuous	N/A	1% item 768 (884) (related to Fibrous glass)

WHMIS Status: Not controlled

WHMIS Classification: None

Section 16. Other Information

HMIS and NFPA Hazard Ratings:

Category	HMIS	NFPA
Health	1	1
Flammability	0	0
Reactivity	0	0

NFPA Unusual Hazards: None

HMIS Personal Protection: To be supplied by user depending upon use.

MSDS STATUS: The information presented in this document is true to the best of our knowledge. The precautions listed are to be considered performance guidelines and not a guarantee. We shall not be liable for any damages or loss arising from intentional or accidental misuse of our product. This MSDS has been prepared only for this product.