

Material Safety Data Sheet

CertainTeed

HEALTH	1
FLAMMABILITY	0
PHYSICAL HAZARD	0
PERSONAL PROTECTION	

MSDS Number: CT 10101-1
MECHANICAL/OEM (Category 1-Rotary)
DATE PREPARED: October 1, 2007

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product/Trade Name:

Commercial Blanket	ToughGard™ Duct Board with Enhanced Surface
Commercial Board	ToughGard™ Rigid Liner Board with Enhanced Surface
Crimp Wrap™	ToughGard™ R Duct Liner with Enhanced Surface
Insulation for Flex Duct	ToughGard™ R-EP Duct Liner
Metal Building Insulation 202-96	Ultra* Duct™ Gold
OEM Board	Universal Blanket
SoftTouch™ Duct Wrap	UltraDuct™ Black

Chemical Name: Mixture

CAS #: Not Applicable

Common Name: Fiber Glass Insulation

Product Use: Acoustical and thermal Insulation

MANUFACTURER INFORMATION:

CertainTeed Corporation
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OUTSIDE OF THE U.S. CHEMTREC (703) 527-3887

2. HAZARD IDENTIFICATION

Emergency Overview

This product may cause temporary irritation to the upper respiratory system, eyes, and skin.

Fire and plasma or other type of cutting tool may cause the release of fumes and smoke. See section 5 for decomposition products.

Summary

Avoid Inhalation, skin and eye contact as temporary irritation may occur. Wear appropriate personal protective equipment as described in Section 8.

Routes of Exposure:

Inhalation, skin, and eye contact.

Potential Health Effects: Eyes

Temporary irritation or redness may occur.

Potential Health Effects: Skin

Temporary irritation of the skin may occur in some individuals.

Potential Health Effects: Ingestion: Ingestion of this product is unlikely.

Potential Health Effects: Inhalation

Temporary irritation of nose and throat may occur. Fiber glass wool is a possible cancer hazard. Use of these products has not been shown to cause cancer in humans. Fiber glass wool caused cancer in animals through unnatural routes of exposure (surgical implantation), but has not produced cancer by inhalation.

Medical Conditions Aggravated by Exposure:

Respiratory or skin conditions that are aggravated by mechanical irritants may be at an increased risk for worsening from exposure to dust and fibers from cutting, sawing or drilling this product.

HMIS Ratings: Health: 1 Fire: 0 Physical Hazard: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe * = Chronic hazard

3. COMPOSITION / INFORMATION ON INGREDIENTS

CAS #	Component	Percent
65997-17-3	Glass, oxide, chemicals (wool)	60-100
25104-55-6	Urea, polymer with formaldehyde and phenol (cured)	10-30
65997-17-3	Coated/Faced product contain: Glass, oxide chemicals (textile)	3-7
25038-59-9	ASJ faced products contain: Polyester fiber	1-5
Proprietary	ToughGard™ R only contains: Acrylic-based polymer	1-5
9003-20-7	Ultra*Duct™ & Commercial Board faced products only, adhesive contains: Acetic acid ethenyl ester homopolymner	1-5
1309-64-4	Coated/Faced products contain: Antimony trioxide	1-5

Product	Fiber Glass Wool	Phenol Formaldehyde Urea Polymer	Textile Fiber Glass	Polyester Fiber	Acrylic-Based Polymer	Acetic Acid Ethenyl Ester Homopolymer	Antimony Trioxide
Commercial Blanket	✓	✓					
Commercial Board							
Plain	✓	✓					
FSK	✓	✓	✓			✓	✓
ASJ	✓	✓	✓	✓		✓	✓
PSK	✓	✓	✓			✓	✓
Crimp Wrap							
ASJ	✓	✓	✓	✓			✓
Foil Scrim	✓	✓					
Insulation for Flex Duct	✓	✓					
Metal Building Insulation 202-96	✓	✓					
OEM Board	✓	✓					
SoftTouch™ Duct Wrap							
Plain	✓	✓					
FSK	✓	✓	✓				✓
PSK	✓	✓	✓				✓
ToughGard™ Rigid Liner Board with Enhanced Surface	✓	✓	✓				✓
ToughGard™ R Duct Liner with Enhanced Surface	✓	✓	✓		✓		✓
ToughGard™ R-EP Duct Liner	✓	✓	✓		✓		✓
Ultra* Duct™ Gold	✓	✓	✓			✓	✓
Ultra* Duct™ Black	✓	✓	✓			✓	✓
Universal Blanket							
Plain	✓	✓					
FSK	✓	✓	✓				✓
ToughGard™ Duct Board with Enhanced Surface	✓	✓	✓	✓		✓	✓

Component Information/Information on Non-Hazardous Components

This product is considered hazardous under 29 CFR 1910.1200 (Hazard Communication). This product may be regulated, have exposure limits or other information identified as the following: Glass wool fiber, Antimony compounds.

This material is a controlled product under Canadian WHMIS regulations

4. FIRST AID MEASURES

First Aid: Eyes

In case of contact, immediately flush eyes with large amounts of water, continuing to flush for 15 minutes. If irritation persists get medical attention

First Aid: Skin

Wash exposed skin with soap and water. If irritation develops or persists, seek medical attention.

First Aid: Ingestion

Product is not intended nor likely to be ingested or eaten. Consult a physician if unusual reaction is noted.

First Aid: Inhalation

Remove to fresh air, apply artificial respiration and/or oxygen if necessary and get medical attention.

5. FIRE FIGHTING MEASURES**General Fire Hazards:**

See Section 9 for Flammability Properties.

Does not support combustion. These products contain a cured phenolic-based binder and various facings which contain retardant systems to reduce the possibility of fire. Use of plasma or other type of cutting tool may cause the release of toxic fumes and smoke.

Facings on these products may burn. Do not leave facing exposed when working close to an open flame. If burned, the materials could release toxic fumes.

Hazardous Combustion Products:

If burned, the materials could release toxic fumes and smoke as described below.

The binder and kraft facings combustion products include oxides of carbon, sulfur and other potentially volatile organic compounds.

The FSK facings combustion products include oxides of carbon, oxides of arsenic, oxides of nitrogen, hydrogen chloride, chlorine, antimony, and traces of arsenic.

The ASJ facings combustion products include oxides of carbon, oxides of arsenic, oxides of nitrogen, hydrogen chloride, chlorine, antimony, traces of arsenic, bromine gas and hydrogen bromide.

The airstream facings combustion products include oxides of carbon, antimony, hydrogen bromide, formaldehyde, and trace hydrogen cyanide.

Extinguishing Media: Use any media suitable for the surrounding fires.

Fire Fighting Equipment/Instructions:

Fire fighters should wear full-face, self contained breathing apparatus and impervious protective clothing. Fire fighters should avoid inhaling any combustion products.

NFPA Ratings: Health: 1 Fire: 0 Reactivity: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

6. ACCIDENTAL RELEASE MEASURES**Containment Procedures:**

Containment of this material should not be necessary. Remove sources of ignition.

Clean-Up Procedures:

Collect dust or particulates using a vacuum cleaner with a HEPA filter. Avoid the generation of dusts during clean-up.

Evacuation Procedures:

Persons not wearing appropriate protective equipment should be excluded from area of spill until clean-up has been completed. Ventilate the contaminated area.

Special Procedures: Avoid contact with skin and eyes.

7. HANDLING AND STORAGE

Handling Procedures:

Do not breathe dust from this material. Use this product with adequate ventilation. Keep this product from heat, sparks, or open flame. Always wash work clothes separately from other clothing. Wipe out the washer or sink to prevent loose glass fibers from getting on other clothing. Wash thoroughly after handling. Wear personal protective equipment as described in Section 8.

Storage Procedures: Store in a dry place and under cover to protect product.

8. EXPOSURE CONTROL / PERSONAL PROTECTION

A: Component Exposure Limits:

Fiberglass mat, which is made from either: Continuous filament fiber glass (encapsulated) or Fibrous glass (65997-17-3)

- ACGIH: 1 fiber/cm³ TWA (respirable fibers, length >5 µm, aspect ratio ≥3:1, as determined by the membrane filter method at 400-450X magnification [4-mm objective], using phase-contrast illumination) (related to Glass wool fibers)
- NIOSH: 3 fibers/cm³ TWA (fibers ≤ 3.5 µm in diameter and ≥ 10 µm in length); 5 mg/m³ TWA (total) (related to Mineral wool fiber)
- British Columbia: 1 fibre/cm³ TWA (fibres longer than 5 µm, with an aspect ratio of equal to/greater than 3:1) (related to Glass wool fibers)
- Manitoba: 1 fiber/cm³ TWA (respirable fibers, length >5 µm, aspect ratio ≥3:1, as determined by the membrane filter method at 400-450X magnification [4-mm objective], using phase-contrast illumination) (related to Glass wool fibers)
- New Brunswick: 1 fibre/cm³ TWA (fibres longer than 5 µm with a diameter less than 3 µm, aspect ratio greater than 5:1) (related to Glass wool fibres)
- Northwest Territories: 3 fibres/cm³ TWA (with a diameter ≤3.5 µm and a length ≥10 µm); 5 mg/m³ TWA (total mass) (related to Mineral wool fibre)
- Nova Scotia: 1 fiber/cm³ TWA (respirable fibers, length >5 µm, aspect ratio ≥3:1, as determined by the membrane filter method at 400-450X magnification [4-mm objective], using phase-contrast illumination) (related to Glass wool fibers)
- Nunavut: 3 fibre/cm³ TWA (with a diameter ≤3.5 µm and a length ≥10 µm); 5 mg/m³ TWA (total mass) (related to Mineral wool fibre)
- Ontario: 1 fibres/cm³ TWAEV (respirable, length>5 microns, aspect ratio≥ 3.1) (related to Glass wool fibres)
- Quebec: 2 fibres/cm³ TWAEV (respirable) (related to Insulation wool fibres, glass wool)
- Yukon: 30 mppcf TWA; 10 mg/m³ TWA (respirable mass) (related to Mineral wool fibre)

Antimony trioxide (1309-64-4)

ACGIH:	0.5 mg/m3 TWA (as Sb) (related to Antimony compounds)
OSHA:	0.5 mg/m3 TWA (as Sb) (related to Antimony compounds)
NIOSH:	0.5 mg/m3 TWA (as Sb) (related to Antimony compounds)
British Columbia:	0.5 mg/m3 TWA (as Sb) (related to Antimony compounds)
Manitoba:	0.5 mg/m3 TWA (as Sb) (related to Antimony compounds)
New Brunswick:	0.5 mg/m3 TWA (as Sb) (related to Antimony compounds)
Northwest Territories:	1.5 mg/m3 STEL (production, handling and use, as Sb)
Nova Scotia:	0.5 mg/m3 TWA (as Sb) (related to Antimony compounds)
Nunavut:	1.5 mg/m3 STEL (production, handling and use, as Sb)
Ontario:	0.5 mg/m3 TWAEV (handling and use, as Sb)
Quebec:	0.5 mg/m3 TWAEV (as Sb)
Saskatchewan:	1.5 mg/m3 STEL (as Sb) (related to Antimony compounds)
Yukon:	0.5 mg/m3 TWA (as Sb) (related to Antimony compounds)

Engineering Controls:

Avoid spread of fiber glass dust. Use general ventilation and use local exhaust, where possible, in confined or enclosed spaces.

PERSONAL PROTECTIVE EQUIPMENT**Personal Protective Equipment: General**

Use good industrial hygiene practices in handling this material. Availability of eye wash fountains are recommended.

Personal Protective Equipment: Eyes/Face

Safety glasses with side shields or chemical goggles are recommended to prevent fibers from contacting the eyes.

Personal Protective Equipment: Skin

Work clothing sufficient to prevent all skin contact should be worn, such as coveralls, long sleeves and cap.

Personal Protective Equipment: Respiratory

A properly fitted NIOSH approved N 95 series disposable dust respirator in high humidity environments or equivalent should be used when: high dust levels are encountered; the level of glass fibers in the air exceeds the occupational exposure limits; or if irritation occurs.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Yellow fibers	Odor:	Faint resin odor
Physical State:	Solid	pH:	Not applicable
Vapor Pressure:	Not applicable	Vapor Density:	Not applicable
Boiling Point:	>2550 F (glass)	Melting Point:	2550 F (glass)
Solubility (H2O):	Small	Specific Gravity:	Glass = 2.5
Flash Point:	Does not support combustion	Flash Point Method:	Not applicable
Lower Flammability Limit:	Not applicable	Upper Flammability Limit:	Not applicable
Auto Ignition Temp.:	Not applicable	Burning Rate:	Not applicable

10. CHEMICAL STABILITY AND REACTIVITY INFORMATION

Chemical Stability: Stable under normal conditions.

Conditions to Avoid: Keep away from heat, ignition sources and incompatible materials.

Incompatibility: This product reacts with hydrofluoric acid.

Hazardous Decomposition:

When burned, the specific facings may decompose and emit toxic fumes. The binder and kraft facings decomposition products include oxides of carbon, sulfur and other potentially volatile organic compounds.

The FSK facings decomposition products include oxides of carbon, oxides of arsenic, oxides of nitrogen, hydrogen chloride, chlorine, antimony, and traces of arsenic.

The ASJ facings decomposition products include oxides of carbon, oxides of arsenic, oxides of nitrogen, hydrogen chloride, chlorine, antimony, traces of arsenic, bromine gas and hydrogen bromide.

The airstream facings decomposition products include oxides of carbon, antimony, hydrogen bromide, formaldehyde, and trace hydrogen cyanide.

Possibility of Hazardous Reactions: Will not occur.

11. TOXICOLOGICAL INFORMATION

Acute Dose Effects

A: General Product Information

No information available for the product. Temporary irritation may be observed in the upper respiratory system, eyes, and skin.

This product has not been tested as a separate entity. Therefore, the hazards must be evaluated on the basis of the individual ingredients, and those hazards must be assumed to be additive in the absence of complete information. The hazards described in this document have been evaluated on a threshold of 1.0% for all hazardous ingredients and 0.1% for all carcinogens.

Carcinogenicity

A: General Product Information

This product contains antimony trioxide which may cause cancer based on sufficient animal data.

Following a thorough review of all the medical-scientific data available at a meeting in October 2001, the IARC panel lowered the classification for glass wool insulation fibers from a Group 2B classification ("possibly carcinogenic to humans") to a Group 3 classification ("not classifiable as to carcinogenicity to humans"). IARC said that there is "no evidence of increased risks of lung cancer or of mesothelioma from occupational exposures during manufacturing of these materials, and inadequate evidence over all of any cancer risk."

B: Component Carcinogenicity

Fiberglass mat, which is made from either: Continuous filament fiber glass (encapsulated) or Fibrous glass (65997-17-3)

- ACGIH: A3 - Confirmed animal carcinogen with unknown relevance to humans (related to Glass wool fibers)
- NTP: Reasonably Anticipated To Be A Carcinogen (respirable size) (related to Glasswool) (Possible Select Carcinogen)
- IARC: Monograph 81 [2002] (listed under Man-made mineral fibres), Monograph 43 [1988] (related to Insulation glass wool) (Group 3 (not classifiable))

Antimony trioxide (1309-64-4)

- ACGIH: A2 - Suspected Human Carcinogen (production)
- IARC: Monograph 47 [1989] (Group 2B (possibly carcinogenic to humans))

Mutagenicity: None

Teratogenicity: None

Developmental Effects: No information available for the product.

12. ECOLOGICAL INFORMATION

Ecotoxicity

A: General Product Information

Binder-coated fiber glass is hydrophobic. Therefore, no adverse environmental effects would be expected if this product were accidentally released in the water or soil. This material is not expected to be harmful to aquatic life.

Environmental Fate: No information available for the product.

13. WASTE DISPOSAL CONSIDERATIONS

US EPA Waste Number & Descriptions

A: General Product Information

Dispose of waste material in an approved landfill in accordance with federal, state, and local regulations. If you are unsure of the regulations, contact your Public Health Department, or the local office of the Environmental Protection Agency (EPA).

B: Component Waste Numbers

No EPA-listed Waste Numbers are being shown for this product's components.

Disposal Instructions

Dispose of waste material according to Federal, State, local and Provincial environmental regulations. See Section 7 for Handling Procedures; see Section 8 for Personal Protective Equipment recommendations.

14. TRANSPORTATION INFORMATION

US DOT Information

This product is not classified a hazardous material for transport.

TDG Information

Shipping Name: Not classified as a Dangerous Good for transportation.

15. REGULATORY INFORMATION

US Federal

A: General Product Information:

Components of this product have been checked against the non-confidential TSCA inventory by CAS Registry Number. Components not identified on this non-confidential inventory are either exempt from listing (i.e. polymers, hydrates) or are listed on the confidential inventory as declared by the supplier.

B: CERCLA

This material contains one or more of the following chemicals required to be identified under CERCLA (40 CFR 302.4).

Antimony trioxide (1309-64-4)

CERCLA: 1000 lb final RQ; 454 kg final RQ

Acute Health: Yes **Chronic Health:** No **Fire:** No **Pressure:** No **Reactive:** No

State Regulations

A: General Product Information

Other state regulations may apply. Check individual state requirements.

B: Component Analysis - State

The following components appear on one or more of the following state hazardous substances lists:

Component	CAS #	CA	MA	MN	NJ	PA	RI
Fiberglass mat, which is made from either: Continuous filament fiber glass (encapsulated) or Fibrous glass (*related to Mineral wool fiber)	65997-17-3	Yes ¹	Yes ¹	Yes	No	Yes ¹	Yes ¹

C: California Safe Drinking Water and Toxics Enforcement Act (Proposition 65)

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.

Canadian WHMIS Information

A: General Product Information

WHMIS Class D2A - Chronic Toxic Effects - May cause cancer

B: Component Analysis - WHMIS IDL

The following components are identified under the Canadian Hazardous Products Act Ingredient Disclosure List:

Component	CAS #	Minimum Concentration
Antimony trioxide	1309-64-4	1 %

WHMIS Classification:

WHMIS Class D2A - Chronic Toxic Effects - May cause cancer

Additional Regulatory Information

A: General Product Information

No information available for the product.

B: Component Analysis - Inventory

Component	CAS #	TSCA	DSL	EINECS
Fiberglass mat, which is made from either: Continuous filament fiber glass (encapsulated) or Fibrous glass	65997-17-3	Yes	Yes	Yes
Urea, polymer with formaldehyde and phenol	25104-55-6	Yes	Yes	No
Mylar	25038-59-9	Yes	Yes	No
Antimony trioxide	1309-64-4	Yes	Yes	Yes

16. ADDITIONAL COMMENTS

Other Information

Disclaimer: Reasonable care has been taken in the preparation of this information, but the supplier gives no warranty of merchantability or of fitness for a particular purpose. Any product purchased is sold on the assumption the purchaser will make his own tests to determine the quality and suitability of the product. Supplier expressly disclaims any and all liability for incidental and/or consequential property damage arising out of the use of this product. No information provided shall be deemed to be a recommendation to use any product in conflict with any existing patent rights. Read the Material Safety Data Sheet before handling product.

Acronyms/definitions used in this MSDS:

- ACGIH American Conference of Governmental Industrial Hygienists;
- CAS # Chemical Abstracts Services Number;
- CERCLA Comprehensive Environmental Response, Compensation and Liability Act;
- CFR Code of Federal Regulations;
- EPA Environmental Protection Agency;
- HMIS Hazardous Material Identification System;
- IARC International Agency for Research on Cancer;
- LFL Lower Flammable Limit;
- mg/m³ Milligrams per cubic meter;
- NFPA National Fire Protection Association;
- NIOSH National Institute for Occupational Safety and Health;
- NTP National Toxicology Program;

OSHA	Occupational Safety and Health Administration;
ppm	Parts per million;
PEL	Permissible Exposure Limit;
REL	Recommended Exposure Limit;
SARA	Superfund Amendments and Reauthorization Act;
RCRA	Resource Conservation and Recovery Act;
Title III	Emergency Planning and Community Right to Know Act;
	Section 302- Extremely Hazardous Substances;
	Section 313- Toxic Chemicals;
TLV	Threshold Limit Value;
TWA	Time Weighted Average;
UFL	Upper Flammable Limit.

MSDS History

MSDS Revision Summary:

<u>Date</u>	<u>MSDS No.</u>	<u>Comments</u>
3/28/2002	CT2523-18	Revised MSDS
08/01/2003	CT2523-19	Revised MSDS
07/26/2007	CT10101-1	MSDS number changed and MSDS revised
10/03/2007	CT10101-1	Product listing updated

This is the end of MSDS # CT 10101-1