Material Safety Data Sheet

CertainTeed

MECHANICAL/OEM (Category 1-Rotary)

DATE PREPARED: AUGUST 1, 2003 *MSDS Number: CT 2523-19*

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

CHEMICAL PRODUCT IDENTIFICATION

Product/Trade Name: Commercial Blanket
Commercial Board
CrimpWrap™
Insulation for Flex Duct
Metal Building Insulation 202-96
OEM Board
Standard Duct Wrap
ToughGard™ Rigid Liner Board with Enhanced Surface
ToughGard™ R Duct Liner with Enhanced Surface
Ultra*Duct™ Gold
Universal Blanket
Utility Blanket
ToughGard™ Duct Board with Enhanced Surface

Chemical Name: Mixture

CAS No: None Assigned

Common Name: Fiber Glass Insulation

Product Use: Acoustical and Thermal Insulation

MANUFACTURER INFORMATION

CertainTeed Corporation
750 E. Swedesford Road
P.O. Box 860
Valley Forge, PA USA 19482-0105

Phone: Main Number 610-341-7000
9 am – 5 pm (USA Eastern Standard Time)

EMERGENCY TELEPHONE: CHEMTREC 800-424-9300

2. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name: Glass, oxide, chemicals (wool)

CAS No: 65997-17-3

Common Name: Fibrous glass wool

Percent in Product: 58-98% by weight-maximum

LD_{50}: N/A

LC_{50}: N/A

Exposure Limits:

OSHA PEL TWA	ACGIH TLV TWA	NIOSH REL
Total Nuisance Dust: 15 mg/m³	Synthetic Vitreous Fibers - Glass Wool Fibers: 1 f/cc	Total Glass Dust: 5 mg/m³
Respirable Nuisance Dust: 5 mg/m³		Respirable Fibers: 3 f/cc
HSPP Voluntary: 1 f/cc		

See Section 16 for definitions of respirable fibers.

2. COMPOSITION/INFORMATION ON INGREDIENTS (Continued)

Chemical Name:	Urea, polymer with formaldehyde and phenol (cured)		
CAS No:	25104-55-6		
Common Name:	Phenol formaldehyde urea polymer		
Percent in Product:	18% by weight-maximum		
LD_{50}:	N/A		
LC_{50}:	N/A		
Exposure Limits:	**OSHA PEL TWA**	**ACGIH TLV TWA**	**OTHER**
	None	None	None

Chemical Name:	**Coated/Faced products (excluding vinyl) contain:** Glass, oxide chemicals (textile)		
CAS No:	65997-17-3		
Common Name:	Textile fiber glass: Continuous filament glass fibers		
Percent in Product:	7.5% by weight-maximum		
LD_{50}:	N/A		
LC_{50}:	N/A		
Exposure Limits:	**OSHA PEL TWA**	**ACGIH TLV TWA**	**NIOSH REL TWA**
	Total Nuisance Dust: 15 mg/m^3 Respirable Nuisance Dust: 5 mg/m^3	Synthetic Vitreous Fibers: 1f/cc (continuous filament glass fibers)	Total Glass Dust: 5 mg/m^3 Respirable Fibers: 3 f/cc

Chemical Name:	**ASJ faced products contain:** Polyester fiber		
CAS No:	25038-59-9		
Common Name:			
Percent in Product:	5% by weight-maximum		
LD_{50}:	N/A		
LC_{50}:	N/A		
Exposure Limits:	**OSHA PEL**	**ACGIH TLV TWA**	**OTHER**
(If yes, fill in)	None	None	None

Chemical Name:	**ToughGard™ R only contains:** Acrylic-based polymer		
CAS No:	Proprietary		
Common Name:			
Percent in Product:	<5% by weight		
LD_{50}:	N/A		
LC_{50}:	N/A		
Exposure Limits:	**OSHA PEL TWA**	**ACGIH TLV TWA**	**NIOSH REL TWA**
	None	None	None

Chemical Name:	**Ultra*Duct™ & Commercial Board faced products only, adhesive contains:** Acetic acid ethenyl ester homopolymer		
CAS No:	9003-20-7		
Common Name:	Vinyl acetate polymer		
Percent in Product:	4% by weight-maximum		
LD_{50}:	N/A		
LC_{50}:	N/A		
Exposure Limits:	**OSHA PEL TWA**	**ACGIH TLV TWA**	**OTHER**
	None	None	None

2. COMPOSITION/INFORMATION ON INGREDIENTS (Continued)

Chemical Name: **Coated/Faced products (excluding vinyl) contain:**
Antimony trioxide
CAS No: 1309-64-4
Common Name:
Percent in Product: 3% by weight-maximum
LD_{50}: N/A
LC_{50}: N/A

Exposure Limits:	**OSHA PEL TWA**	**ACGIH TLV TWA**	**NIOSH REL TWA**
	0.5 mg/m³	0.5 mg/m³	0.5 mg/m³

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	✓	✓					
Standard Duct Wrap							
Plain	✓	✓					
FSK	✓	✓	✓				✓
Vinyl	✓	✓					
ToughGard Rigid Liner Board with Enhanced Surface	✓	✓	✓				✓
ToughGard R Duct Liner with Enhanced Surface	✓	✓	✓		✓		✓
Ultra*Duct Gold	✓	✓	✓			✓	✓
Universal Blanket							
Plain	✓	✓					
FSK	✓	✓	✓				✓
Vinyl	✓	✓					
Utility Blanket							
Plain	✓	✓					
FSK	✓	✓	✓				✓
Vinyl	✓	✓					
ToughGard Duct Board with Enhanced Surface	✓	✓	✓	✓		✓	✓

3. HAZARD IDENTIFICATION

EMERGENCY OVERVIEW

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

	Health	Fire	Reactivity
NFPA Rating:	0	0	0
HMIS Rating:	1	0	0

(see section 16 for acronyms)

Degree of Hazard
0 - Minimal (Insignificant)
1 - Slight
2 - Moderate
3 - Serious (High)
4 - Severe (Extreme)
* - Chronic Health Effect(s)

POTENTIAL HEALTH EFFECTS

Primary Routes of Entry: Inhalation, skin and eye contact.

Acute Inhalation: Temporary upper respiratory irritation.

Chronic Inhalation: None known.

Acute Skin Contact and Sensitization: Temporary skin irritation seen in certain individuals.

Chronic Skin Contact: None known.

Skin Absorption: None.

Acute Eye Contact: Temporary eye irritation.

Chronic Eye Contact: None known.

Acute Ingestion: Unlikely. Contact physician if unusual reaction is noted.

Chronic Ingestion: None known.

Medical Conditions Which May Be Aggravated: Pre-existing conditions which may be aggravated by mechanical irritants upon inhalation or skin contact.

Carcinogenicity:

Ingredient: Fiber glass wool, Glasswool (respirable size)
IARC: Group 3, not classifiable as to carcinogenicity to humans.
NTP: Listed as 2, reasonably anticipated to be a carcinogen, sufficient evidence from studies in experimental animals
OSHA: Not Listed

Ingredient: Antimony Trioxide
IARC: Possibly carcinogenic to humans – 2B
NTP: Not Listed
OSHA: Not Listed

Ingredient: Fibrous glass textile or continuous strand
IARC: Group 3, not classifiable as to carcinogenicity to humans.
NTP: Not Listed
OSHA: Not Listed

Ingredient: Acetic acid ethenyl ester homopolymer
IARC: Group 3, not classifiable as to carcinogenicity to humans.
NTP: Not Listed
OSHA: Not Listed

Mutagenicity: None

Teratogenicity: None

Reproductive Toxicity: None

Toxicological Synergistic Products: None

4. FIRST AID MEASURES

Inhalation: Remove from exposure. Get medical help if irritation persists.

Eye Contact: Flush well with running water for at least 15 minutes. Get medical help if irritation persists.

Skin Contact: Cleanse with soap and warm water. Get medical help if irritation persists.

Ingestion: Unlikely. Consult physician if unusual reaction is noted.

Fires: Remove to fresh air. Administer oxygen and get medical help.

Information for Medical Practitioners: Skin irritation responds well to mild hydrocortisone cream.

5. FIRE FIGHTING MEASURES

Flash Point (°F) and Method: Does not support combustion.

Flammable Limits: **LEL:** N/A **UEL:** N/A

Autoignition Temperature: N/A

Extinguishing Media: Use that which is applicable to surrounding fire.

Special Fire Fighting Procedures: Treat as residential building materials.

Conditions of Flammability: Facings on these products may burn. Care should be taken to not leave facing exposed when working close to an open flame.

Unusual Fire and Explosion Hazard, Decomposition Products: These products contain a cured phenolic-based binder and various facings which contain retardant systems to reduce the possibility of fire. If burned, the materials could release toxic fumes as described below. The binder and kraft facings in a fire situation may emit toxic fumes and smoke containing carbon dioxide, carbon monoxide, sulfur dioxide and other potentially toxic volatile organic compounds. Vinyl facings may decompose and release hydrogen chloride. The FSK facings may decompose and release carbon monoxide, carbon dioxide, hydrogen chloride, chlorine gas, antimony and traces of arsenic, oxides of arsenic and oxides of nitrogen. The ASJ facing may decompose and release carbon monoxide, carbon dioxide, hydrogen chloride, chlorine gas, antimony and traces of arsenic, oxides of arsenic, bromine gas and hydrogen bromide. The WMP-10 facing may decompose and release carbon monoxide, carbon dioxide, hydrogen chloride, chlorine gas, antimony, and traces of arsenic, oxides of arsenic, oxides of nitrogen, bromine gas and hydrogen bromide. The airstream facings may release carbon monoxide, carbon dioxide, antimony, hydrogen bromide, formaldehyde and trace hydrogen cyanide.

6. ACCIDENTAL RELEASE MEASURES

Spills/Leaks: Vacuum dust deposits.

Accidental or Unplanned Releases: Clean area with vacuum or wet methods.

7. HANDLING AND STORAGE

Handling: When handling and/or applying this insulation:

- Wear long sleeves, gloves and cap.
- Wear eye protection (goggles, safety glasses or face mask).
- Use a NIOSH-certified disposable or reusable particulate respirator with an efficiency of N95 or higher, such as a 3M Brand #8210, #8511, #8233 or equivalent.

After handling and/or applying this insulation:

- Bathe with soap and warm water.
- Wash work clothes separately and rinse washer after use.

Storage: Store under cover to protect product.

8. EXPOSURE CONTROL/PERSONAL PROTECTION

Personal Protective Equipment:

Respirators: Wear NIOSH-certified respirators when handling and applying fiber glass insulation products in accordance with the following NIOSH-based exposure guidelines.

Exposure	Respirator (or equivalent)
Less than 10 times exposure guideline	1/2 mask N95 or higher, such as 3M Brand #8210, #8511 or #8233
Less than 50 times exposure guideline	Full face N100 or higher, such as 3M Brand 6000 or 7000 series

Work Practices and Engineering Controls: Avoid spread of fiber glass dust. Provide general and/or local exhaust ventilation to control airborne dust levels below exposure limits.

Product Package Label:
WARNING

Contains fiber glass wool which, under the National Toxicology Program, is a possible cause of cancer if inhaled.

This product contains a chemical known to the State of California to cause cancer.

This fiber glass wool may cause temporary skin, eye, throat and upper respiratory irritation. Product contains cured binder with urea, formaldehyde and phenol.

In 2001, the International Agency for Research on Cancer (IARC) reclassified glass wool as Group 3, not classifiable as to carcinogenicity to humans.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Solid
Boiling Point (°F): >2550° (glass)
Melting Point (°F): 2550° (glass)
Softening Point (°F): >1200°
Odor: Faint resin odor
Odor Threshold: None
Color: Yellow
pH: N/A
Vapor Density (Air=1): N/A
Specific Gravity (H_2O=1): Glass=2.5
% Volatile by Volume: N/A
Vapor Pressure: N/A
Evaporative Rate (ethyl ether=1): N/A
% Solubility (H_2O): Small
Freezing Point: N/A
Coefficient of Water to Oil Distribution: N/A

Appearance: Fibers assembled into tubes, blankets or boards. The products may be faced with kraft, aluminum foil, vinyl or a combination thereof. Some products may have a coating.

10. REACTIVITY

Stability: Material is stable.

Corrosivity: None

Incompatibility: Hydrofluoric Acid

Reactivity: None

Reactivity with water: None

Explosion: Product is not sensitive to mechanical impact or static discharge.

11. TOXICOLOGICAL INFORMATION

Following a thorough review of all of 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 the manufacture of these materials, and inadequate evidence overall of any cancer risk."

12. ECOLOGICAL INFORMATION

These products are not manufactured with, nor do they contain any Class I Ozone depleting chemicals as defined by the EPA in Title VI of the Clean Air Act Amendments of 1990, 40 CFR Part 82, Protection of Stratospheric Ozone.

This product is not classified as a hazardous air pollutant in Title III Clean Air Act of 1990.

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. No harm to fish or wildlife would be caused by this product.

13. WASTE DISPOSAL CONSIDERATIONS

Scrap material should be disposed of in a sanitary landfill in accordance with federal, state and local regulations. Waste material is not considered hazardous as defined by RCRA (40 CFR Part 261).

14. TRANSPORTATION INFORMATION

National Motor Freight Classification (NMFC): 103300S3, Insulation Material – NOI (Not Otherwise Indexed).

15. REGULATORY INFORMATION

As this product is considered a mixture, each component is listed below identifying its status on specific regulatory lists.

CHEMICAL NAME	SARA Title III Section 313	SARA Title III Section 302	California Proposition 65	Canada DSL	Canada NDSL	Korea KECI	Europe EINECS	Japan MITI	Philippines PICCS	Australia AICS	USA TSCA
Fiber glass wool & textile 65997-17-3	—	—	✓†	✓	—	✓	✓	✓	✓	✓	✓
Urea, polymer with formaldehyde and phenol (cured) 25104-55-6	—	—	—	✓	—	✓	—	✓	—	✓	✓
Acetic Acid ethenyl ester homopolymer 9003-20-7	—	—	—	✓	—	✓	—	✓	—	✓	✓
Antimony trioxide 1309-64-4	—	—	✓	✓	—	✓	✓	✓	✓	✓	✓
Polyester fiber 25038-59-9	—	—	—	✓	—	✓	—	✓	—	—	✓
Kaolin 1332-58-7	—	—	—	—	✓	✓	—	✓	✓	✓	✓
Aluminum Oxide 1344-28-1	—	—	—	✓	—	✓	✓	✓	✓	✓	✓

† listed as glass wool fibers (airborne particulates of respirable size)

16. ADDITIONAL COMMENTS

Acronyms/definitions used in this MSDS:

ACGIH: American Conference of Governmental Industrial Hygienists
CAS No: Chemical Abstracts Service Number
EPA: Environmental Protection Agency
f/cc: Fibers per cubic centimeter
HMIS: Hazardous Material Identification System
HSPP: Health & Safety Partnership Program between OSHA and the North American Insulation Manufacturer's Association (NAIMA)
IARC: International Agency for Research on Cancer
LC_{50}: The air concentration of a substance, when administered over a specified time period in an animal assay, is expected to cause the death of 50% of a defined animal population.
LD_{50}: The single dose of a substance that, when administered by a defined route in an animal assay, is expected to cause the death of 50% of a defined animal population

6. ADDITIONAL COMMENTS (Continued)

LEL:	Lower Explosive Limit
mg/m³:	Milligrams per cubic meter
N/A:	Not Applicable
NFPA:	National Fire Protection Association
NIOSH:	National Institute for Occupational Safety and Health
NMFC:	National Motor Freight Classification
NOI:	Not Otherwise Indexed
NTP:	National Toxicology Program
N95:	A particulate filter respirator certified for at least 95% filter efficiency. For use in atmospheres containing solid or particulate hazards that do not contain oil.
N100:	A particulate filter respirator certified for 99.97% filter efficiency. For use in atmospheres containing solid or particulate hazards that do not contain oil.
OSHA:	Occupational Safety and Health Administration
PEL:	Permissible Exposure Limit
RCRA:	Resource Conservation and Recovery Act
SARA:	Superfund Amendments and Reauthorization Act
Title III:	Emergency Planning and Community Right to Know Act Section 302 - Extremely Hazardous Substances Section 313 - Toxic Chemicals
TLV:	Threshold Limit Value
TSCA:	Toxic Substances Control Act (USA)
TWA:	Time Weighted Average
UEL:	Upper Explosive Limit

Australia AICS:	Australian Inventory of Chemical Substances
California Proposition 65:	California Title 22, Division 2, Chapter 3 Safe Drinking Water and Toxic Enforcement Act of 1986
Canada DSL:	Canadian Domestic Substance List
Canada NDSL:	Canadian Non-domestic Substance List
Europe EINECS:	European Inventory of Existing Commercial Chemical Substances
Japan MITI:	Ministry of International Trade and Industry
Korea KECI:	Korean Existing Chemicals Inventory
Philippines PICCS:	Philippine Inventory of Chemicals and Chemical Substances
Respirable Nuisance Dust:	The respirable fraction of suspended airborne particulates
Respirable Fibers (ACGIH):	Suspended airborne particulates with lengths greater than 5 microns and a 3:1 length to width aspect ratio. Results given as f/cc.
Respirable Fibers (HSPP):	Suspended airborne particulates with diameters of 3 micrometers or less, lengths of 5 micrometers or more and 5:1 length-to-width aspect ratio (NIOSH 7400 method, B rules). Results given as f/cc.
Respirable Fibers (NIOSH):	Suspended airborne particulates with diameters of 3.5 microns or less and lengths of 10 microns or more. Results given as f/cc.
Total Nuisance Dust:	Suspended airborne particles of "nuisance" dusts including those of non-respirable size
Total Glass Dust:	Suspended airborne particles of dust composed of glass only, including those of non-respirable size

MSDS History

MSDS Revision Summary:

Date	MSDS No.	Comments
3/28/2002	CT 2523-18	Revised MSDS
8/01/2003	CT 2523-19	Revised MSDS

This is the end of CertainTeed MSDS CT 2523-19