

# Material Safety Data Sheet

# CertainTeed

RESIDENTIAL BUILDING INSULATION

DATE PREPARED: OCTOBER 26, 2001

MSDS Number: CT 1519-16

## 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

### CHEMICAL PRODUCT IDENTIFICATION

Building Insulation (Unfaced & Kraft Faced)  
Foil-Faced Building Insulation  
Flame-Resistant Foil Building Insulation (FSK-25)  
Fiber Glass Blowing Wool  
UltraTherm® Blowing Insulation  
CertaSound™ Acoustical Insulation (Kraft & Unfaced)  
Flame-Resistant Class A (PSK-25) Fiber Glass  
Building Insulation

Basement Wall Insulation  
Commercial Board Insulation  
EasyHandler™ Encapsulated Fiber Glass Insulation  
Noise Reducer™ Sound Batts  
Commercial Blanket  
Masonry Wall Batts  
Flame Resistant-faced Insulation (FSK-25)

**Chemical Name:** Mixture  
**CAS No:** None Assigned  
**Common Name:** Fiber Glass Insulation  
**Product Use:** Acoustical & Thermal Insulation

### MANUFACTURER INFORMATION

CertainTeed Corporation  
P.O. Box 860  
Valley Forge, PA USA  
19482-0105

(610) 341-7000  
9 am - 5 pm (Eastern Time - USA)

EMERGENCY TELEPHONE: CHEMTREC (800) 424-9300

## 2. COMPOSITION/INFORMATION ON INGREDIENTS

**Chemical Name:** Glass, oxide, chemicals  
**CAS No:** 65997-17-3  
**Common Name:** Fibrous glass wool  
**Percent in Product:** 78-97% by weight  
**LD<sub>50</sub>:** N/A  
**LC<sub>50</sub>:** N/A  
**Exposure Limits:**

### OSHA PEL TWA

Total Nuisance Dust:  
15 mg/m<sup>3</sup>  
Respirable Nuisance Dust:  
5 mg/m<sup>3</sup>  
HSPP Voluntary: 1 f/cc  
See Section 16 for definitions of respirable fibers.

### ACGIH TLV TWA

Synthetic Vitreous  
Fibers - Glass Wool  
Fibers: 1 f/cc

### NIOSH REL TWA

Total Glass Dust: 5 mg/m<sup>3</sup>  
Respirable Fibers: 3 f/cc

**2. COMPOSITION/INFORMATION ON INGREDIENTS (Continued)**

<b>Chemical Name:</b>	Urea, polymer with formaldehyde and phenol (cured)		
<b>CAS No:</b>	25104-55-6		
<b>Common Name:</b>	Phenol formaldehyde urea polymer		
<b>Percent in Product:</b>	3-7% by weight		
<b>LD<sub>50</sub>:</b>	N/A		
<b>LC<sub>50</sub>:</b>	N/A		
<b>Exposure Limits:</b>	<u>OSHA PEL TWA</u>	<u>ACGIH TLV TWA</u>	<u>OTHER</u>
	None	None	None

<b>Chemical Name:</b>	<b>For Foil &amp; Kraft Faced Residential Building Insulation, Kraft Faced CertaSound Acoustical Insulation and Noise Reducer, adhesive contains:</b>		
	Asphalt		
<b>CAS No:</b>	8052-42-4		
<b>Common Name:</b>	Petroleum asphalt		
<b>Percent in Product:</b>	0-17% by weight		
<b>LD<sub>50</sub>:</b>	N/A		
<b>LC<sub>50</sub>:</b>	N/A		
<b>Exposure Limits:</b>	<u>OSHA PEL TWA</u>	<u>ACGIH TLV TWA</u>	<u>OTHER</u>
	None	5 mg/m <sup>3</sup>	None

<b>Chemical Name:</b>	<b>For Commercial Board Insulation PSK, FSK, ASJ and WMP, adhesive contains:</b>		
	Acetic acid vinyl ester polymer		
<b>CAS No:</b>	9003-20-7		
<b>Common Name:</b>	Polyvinyl acetate, Acetic acid ethenyl ester homopolymer		
<b>Percent in Product:</b>	<11% by weight maximum		
<b>LD<sub>50</sub>:</b>	N/A		
<b>LC<sub>50</sub>:</b>	N/A		
<b>Exposure Limits:</b>	<u>OSHA PEL TWA</u>	<u>ACGIH TLV TWA</u>	<u>OTHER</u>
	None	None	None

<b>Chemical Name:</b>	<b>For Commercial Board Insulation FSK, ASJ and WMP, adhesive contains:</b>		
	Acetic acid ethenyl ester polymer with ethene		
<b>CAS No:</b>	24937-78-8		
<b>Common Name:</b>	Ethylene vinyl acetate co-polymer		
<b>Percent in Product:</b>	<7%		
<b>LD<sub>50</sub>:</b>	N/A		
<b>LC<sub>50</sub>:</b>	N/A		
<b>Exposure Limits:</b>	<u>OSHA PEL TWA</u>	<u>ACGIH TLV TWA</u>	<u>OTHER</u>
	None	None	None

<b>Chemical Name:</b>	<b>For Blown-in products only:</b>		
	Distillates (petroleum), solvent dewaxed and/or hydrotreated heavy paraffinic		
<b>CAS No:</b>	64742-65-0 and/or 64742-54-7		
<b>Common Name:</b>	Petroleum hydrocarbons		
<b>Percent in Product:</b>	0.5-1.5%		
<b>LD<sub>50</sub>:</b>	N/A		
<b>LC<sub>50</sub>:</b>	N/A		
<b>Exposure Limits:</b>	<u>OSHA PEL TWA</u>	<u>ACGIH TLV TWA</u>	<u>NIOSH REL</u>
	5 mg/m <sup>3</sup>	5 mg/m <sup>3</sup>	5 mg/m <sup>3</sup>
	Oil Mist (mineral)		STEL 10mg/m <sup>3</sup>

### 3. HAZARD IDENTIFICATION

#### EMERGENCY OVERVIEW

	<u>Health</u>	<u>Fire</u>	<u>Reactivity</u>
<b>NFPA Rating:</b>	0	0	0
<b>HMIS Rating:</b>	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

**Target Organs:** Upper respiratory system, lungs, skin and eyes.

**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, Glass wool (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:** 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.

#### **Other Potential Health Risks:**

**Hearing Conservation:** Some blowing machines used to install blown-in products create elevated sound levels which may affect workers' hearing. Use of hearing protection by workers exposed above 85 dB(A) as an 8-hour TWA is recommended.

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#### 4. FIRST AID MEASURES

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

**Eye Contact:** Do not rub or scratch your eyes. 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.

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#### 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 not to 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. The binder and kraft facing in a fire situation may emit toxic fumes and smoke containing carbon dioxide, hydrogen chloride, carbon monoxide and molecular fragments of hydrocarbon particles, carbon-hydrogen-nitrogen and nitrogen-oxygen compounds. Comparative animal inhalation toxicity studies of combustion products on a number of CertainTeed fiber glass insulation products found the insulation products to be no more toxic than wood, based on incapacitation and mortality.

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#### 6. ACCIDENTAL RELEASE MEASURES

**Spills/Leaks:** Vacuum dust deposits. Do not use compressed air for clean-up.

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

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#### 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 established exposure guidelines:

<u>Exposure</u>	<u>Respirator (or equivalent)</u>
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.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical State:</b> Solid	<b>Vapor Density (Air=1):</b> N/A
<b>Boiling Point (°F):</b> N/A	<b>Specific Gravity (H<sub>2</sub>O=1):</b> Glass=2.5
<b>Melting Point (°F):</b> 2200°	<b>% Volatile by Volume:</b> N/A
<b>Softening Point (°F):</b> 1300°	<b>Vapor Pressure:</b> N/A
<b>Odor:</b> Faint resin odor	<b>Evaporative Rate (ethyl ether=1):</b> N/A
<b>Odor Threshold:</b> None	<b>% Solubility (H<sub>2</sub>O):</b> Small
<b>Color:</b> Yellow	<b>Freezing Point:</b> None
<b>pH:</b> N/A	<b>Coefficient of Water to Oil Distribution:</b> None
<b>Appearance:</b> Fibers assembled into blankets or loose fill. The blankets may be faced with kraft, aluminum foil or other facings.	

## 10. REACTIVITY

<b>Stability:</b> Material is stable.
<b>Corrosivity:</b> None
<b>Incompatibility:</b> Hydrofluoric Acid
<b>Reactivity:</b> None
<b>Reactivity with water:</b> None
<b>Explosion:</b> 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

This product is not manufactured with, nor does it contain any Class I Ozone depleting chemicals as defined by 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 is not hazardous as defined by RCRA (40CFR 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 65997-17-3	—	—	✓ <sup>†</sup>	—	✓	✓	✓	✓	✓	✓	✓
Phenol formaldehyde urea polymer 25104-55-6	—	—	—	✓	—	✓	—	✓	—	✓	✓
Petroleum asphalt 8052-42-4	—	—	—	✓	—	✓	—	—	—	✓	✓
Polyvinyl acetate 9003-20-7	—	—	—	✓	—	✓	—	✓	—	✓	✓
Ethylene vinyl acetate co-polymer 24937-78-8	—	—	—	✓	—	✓	—	✓	—	✓	✓
Petroleum hydrocarbons 64742-65-0 and/or 64742-54-7	—	—	—	✓	—	✓	—	—	—	✓	✓

<sup>†</sup> 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
ASJ:	All Service Jacket
CAS No:	Chemical Abstracts Service Number
CFR:	Code of Federal Regulations
dB(A):	decibel, "A" weighted. A unit of sound measurement.
EPA:	Environmental Protection Agency
f/cc:	Fibers per cubic centimeter
FSK:	Foil Scrim Kraft
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 <sub>50</sub> :	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 <sub>50</sub> :	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.
LEL:	Lower Explosive Limit
mg/m <sup>3</sup> :	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
PSK:	Polypropylene Scrim Kraft
RCRA:	Resource Conservation and Recovery Act
REL:	Recommended Exposure Limit
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
WMP:	White Metallized Polypropylene
<b>Australia AICS:</b>	Australian Inventory of Chemical Substances
<b>California Proposition 65:</b>	California Title 22, Division 2, Chapter 3 Safe Drinking Water and Toxic Enforcement Act of 1986
<b>Canada DSL:</b>	Canadian Domestic Substance List
<b>Canada NDSL:</b>	Canadian Non-domestic Substance List
<b>Europe EINECS:</b>	European Inventory of Existing Commercial Chemical Substances
<b>Japan MITI:</b>	Ministry of International Trade and Industry
<b>Korea KECI:</b>	Korean Existing Chemicals Inventory
<b>Philippines PICCS:</b>	Philippine Inventory of Chemicals and Chemical Substances

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**16. ADDITIONAL COMMENTS (Continued)**

<b>Respirable Nuisance Dust:</b>	The respirable fraction of suspended airborne particulates
<b>Respirable Fibers (ACGIH):</b>	Suspended airborne particulates with lengths greater than 5 microns and a 3:1 length to width aspect ratio. Results given as f/cc.
<b>Respirable Fibers (HSPP):</b>	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.
<b>Respirable Fibers (NIOSH):</b>	Suspended airborne particulates with diameters of 3.5 microns or less and lengths of 10 microns or more. Results given as f/cc.
<b>Total Nuisance Dust:</b>	Suspended airborne particles of "nuisance" dusts including those of non-respirable size
<b>Total Glass Dust:</b>	Suspended airborne particles of dust composed of glass only, including those of non-respirable size