



MATERIAL SAFETY DATA SHEET

SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MATERIAL NAME: COMMERCIAL INSULATION – SUSTAINABLE INSULATION™

PRODUCT/TRADE NAME: CertaPro™ AcoustaTherm™ Batts (Unfaced & Kraft-Faced), CertaPro™ Partition Batts, CertaPro™ Thermal Kraft Faced Batts, CertainPro™ Thermal Foil Faced Batts, CertaPro™ Thermal FSK-25 Faced Batts, CertaPro™ Thermal Extended Flange Batts (FSK, White PSK Faced), CertaPro™ AcoustaBoard™ Black, CertaPro™ AcoustaBlanket™ Black

MSDS NO. CT 10161-2

PRODUCT DESCRIPTION: FIBER GLASS INSULATION

CHEMICAL NAME: Mixture
CAS NUMBER: None Assigned
EINECS: None Assigned
MOLECULAR FORMULA: No Data Available

Company Identification

CERTAINTEED CORPORATION
P.O. Box 860
Valley Forge, PA 19482
United States

WEB ADDRESS: www.certainteed.com/insulation

Phone Numbers

Technical Information: (610) 341-7000 - 9 AM – 5 PM (Eastern Time – USA)

*Emergency: (800) 424-9300 - EMERGENCY TELEPHONE: CHEMTREC
Emergency: (703) 527-3887 - OUTSIDE OF THE U.S. CHEMTREC*

PREPARATION DATE: 04/21/2010
LAST REVISION DATE: 11/04/2011
Literature Code: 30-45-058

SECTION 2 - HAZARDS IDENTIFICATION

Emergency Overview

This product may cause temporary irritation to the upper respiratory system, eyes, and skin. Avoid inhalation, skin and eye contact as temporary irritation may occur. Wear appropriate personal protective equipment as described in Section 8.

GHS

Temporary eye, skin, and respiratory irritation may occur. Avoid breathing dust, fume, gas, mist, vapors and/or spray. Contaminated work clothing should not be allowed out of the workplace. Wash thoroughly after handling. Wear protective gloves.



GHS: Skin Irritation - Category 3, Eye Irritation - Category 2B

NFPA/HMIS RATINGS:

	<u>Health</u>	<u>Fire</u>	<u>Reactivity</u>	<u>Degree of Hazard</u>
NFPA RATING:	0	0	0	0 - Minimal (Insignificant) 1 - Slight 2 - Moderate 3 - Serious (High) 4 - Severe (Extreme)
HMIS RATING:	1*	0	0	* - Chronic Health Effect(s)

PHYSICAL FORM: Solid

COLOR: Tan

ODOR: Faint sweet odor

HAZARDS: Mild/Slight Irritant, Mechanical Irritant

ROUTE OF ENTRY: Inhalation, Skin/Dermal, Eye/Ocular

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Pre-existing conditions which may be aggravated by mechanical irritants upon inhalation or skin contact.

POTENTIAL HEALTH EFFECTS:

INHALATION:

ACUTE (IMMEDIATE): Temporary irritation of nose and throat may occur.

CHRONIC (DELAYED): Use of these products has not been shown to cause cancer in humans. Fiber glass wool is a possible cancer hazard. Fiber glass wool has caused cancer in animals but has not produced cancer by inhalation.

SKIN:

ACUTE (IMMEDIATE): Temporary irritation of the skin may occur in some individuals.

CHRONIC (DELAYED): No data available

EYE:

ACUTE (IMMEDIATE): Temporary irritation or redness may occur.

CHRONIC (DELAYED): No data available

INGESTION:

ACUTE (IMMEDIATE): Ingestion of this product unlikely.

CHRONIC (DELAYED): No data available

MUTAGENIC EFFECTS: None

CARCINOGENIC EFFECTS: This product contains glass wool insulation fibers. 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."

REPRODUCTIVE EFFECTS: None

OTHER HEALTH EFFECTS:

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.

See Section 12 for Ecological Information

SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

Composition/Information on Ingredients

Product(s) Containing Component	Chemical Name	CAS	%(weight)	UN;EINICS	LD50/LC50	EU	OSHA PEL/TWA	ACGIH TLV/TWA	NIOSH REL
For Foil & Kraft Faced Residential Building Insulation, Kraft Faced CertaSound Acoustical Insulation and Noise Reducer, adhesive contains:	Asphalt	8052-42-4	0% TO 17%	NA1999; 232-490-9	NDA	NDA	None	0.5 mg/m3	None
For Blown-in products only:	Hydrotreated heavy paraffinic petroleum distillate (highly refined)	64742-54-7	0.5% TO 1.5%	265-157-1	NDA	Carc.Cat. 2; R45	5 mg/m3 (oil mist)	5mg/m3	5 mg/m3
For Blown-in products only:	Mineral oil, petroleum distillates, solvent-dewaxed heavy paraffinic (mild or no solvent-refining or hydrotreatment)	64742-65-0	0.5% TO 1.5%	265-169-7	NDA	Carc.Cat. 2; R45	5 mg/m3 (oil mist)	5 mg/m3	None
Coated/Faced products (excluding vinyl) contain:	Fibrous glass	65997-17-3	78% TO 97%	266-046-0	NDA	NDA	1f/cc (continuous filament glass fibers)	1f/cc (respirable fibers)	5 mg/m3 (total dust)
For Foil & Kraft Faced Residential Building Insulation, Kraft Faced CertaSound Acoustical Insulation and Noise Reducer, adhesive contains:	Green Binder	Proprietary	3% TO 9%	NDA	NDA	NDA	None	None	None

Product(s) Containing Component	Chemical Name	CAS	%(weight)	UN;EINICS	LD50/LC50	EU	OSHA PEL/TWA	ACGIH TLV/TWA	NIOSH REL
For Commercial Board Insulation PSK, FSK, ASJ, and WMP, adhesive contains:	Acetic acid, vinyl ester, polymer	9003-20-7	< 11%	NDA	NDA	NDA	None	None	None
For Commercial Board Insulation FSK, ASJ and WMP, adhesive contains:	Acetic acid, ethenyl ester, polymer with ethene, rubber	24937-78-8	< 7%	NDA	NDA	NDA	None	None	None

According to the Globally Harmonized Standard for Classification and Labeling (GHS) this product is considered Hazardous. In Canada, the product mentioned above is considered Hazardous under the Workplace Hazardous Materials Information System (WHMIS). Under United States Regulations (29 CFR 1900.1200 - Hazard Communication Standard) this product is considered Hazardous.)

See Section 11 for Toxicological Information

SECTION 4 - FIRST AID MEASURES

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

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

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

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

See Section 2 for Potential Health Effects

SECTION 5 - FIRE FIGHTING MEASURES

SUITABLE EXTINGUISHING MEDIA: Use any media suitable for the surrounding fires

UNSUITABLE EXTINGUISHING MEDIA: No data available

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

UNUSUAL FIRE AND EXPLOSION HAZARDS: Does not support combustion. These products contain a cured 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. The binder and kraft facings combustion products include carbon-dioxide, hydrogen chloride, carbon monoxide and molecular fragments of hydrocarbon particles, carbon-hydrogen-nitrogen, nitrogen-oxygen compounds phosphorous 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.

FLASH POINT: NA
FLASH POINT TEST TYPE: N/A
EXPLOSION LIMITS
UPPER: N/A LOWER: N/A

SECTION 6 - ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS: Avoid contact with skin and eyes during clean-up.

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

CONTAINMENT/CLEAN-UP MEASURES: Containment of this material should not be necessary. Remove sources of ignition. Collect dust or particulates using a vacuum cleaner with a HEPA filter. Avoid the generation of dusts during clean-up.

SECTION 7 - HANDLING AND STORAGE

HANDLING: Do not breathe dust from this material. Keep this product from heat, sparks, or open flame. Use this product with adequate ventilation. 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. Use personal protective equipment as described in Section 8.

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

SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

PPE:



RESPIRATORY PROTECTION: A properly fitted NIOSH approved N 95 series disposable dust respirator such as a 3M Brand #8210, #8511, #8233 or equivalent, in high humidity environments 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.

RESPIRATORS: Wear NIOSH-certified respirators when handling and applying fiber glass insulation products in accordance with established 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

EYE/FACE PROTECTION: Safety glasses with side shields should be worn at a minimum. In dusty environments chemical goggles should be worn

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

GENERAL INDUSTRIAL HYGIENE CONSIDERATIONS: Use good industrial hygiene practices in handling this material. Availability of eye wash fountains are recommended.

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

LISTED EXPOSURE LIMITS:

US State California

- Asphalt (8052-42-4): **PELs:** (5 mg/m³ PEL)

United States - ACGIH

- Asphalt (8052-42-4): **TWAs:** (0.5 mg/m³ TWA (inhalable fraction, as benzene-soluble aerosol)) | **Carcinogens:** (A4 - Not Classifiable as a Human Carcinogen (as benzene soluble aerosol)) | **TLV Basis - Critical Effects:** (irritation (as benzene-soluble aerosol))
- Fibrous Glass (65997-17-3): **TWAs:** (1f/cc (Synthetic Vitreous Fibers – continuous filament glass fibers))
- Distillates (petroleum), solvent dewaxed and/or hydrotreated heavy paraffinic (64742-65-0 and/or 64742-54-7): **TWA:** (5 mg/m³)

United States – OSHA

- Fibrous Glass (65997-17-3): **TWA:** (15 mg/m³ (total nuisance dust)); (5 mg/m³ (respirable nuisance dust)) **NAIMA PEL:** 1f/cc (continuous filament glass fibers)
- Distillates (petroleum), solvent dewaxed and/or hydrotreated heavy paraffinic (64742-65-0 and/or 64742-54-7): **TWA:** (5 mg/m³ (oil mist - mineral))

United States - NIOSH

- Asphalt (8052-42-4): **Ceiling Limits:** (5 mg/m³ Ceiling (15 min, fumes))
- Fibrous Glass (65997-17-3): **REL/TWA:** (5 mg/m³ (total glass dust)); (3f/cc (respirable fibers))
- Distillates (petroleum), solvent dewaxed and/or hydrotreated heavy paraffinic (64742-65-0 and/or 64742-54-7): **REL/TWA:** (5 mg/m³ (oil mist - mineral)) | **STEL** 10mg/m³

Canada – British Columbia

- Fibrous Glass (65997-17-3): 1 fiber/cm³ TWA (fibers longer than 5 µm, with an aspect ratio of equal to/greater than 3:1) (related to Glass wool fibers)

Canada – Manitoba

- Fibrous Glass (65997-17-3): 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)

Canada – New Brunswick

- Fibrous Glass (65997-17-3): 1 fibre/cm³ TWA (fibers longer than 5 µm with a diameter less than 3 µm, aspect ratio greater than 5:1) (related to Glass wool fibers)

Canada – Northwest Territories

- Fibrous Glass (65997-17-3): 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 fiber)

Canada – Nova Scotia

- Fibrous Glass (65997-17-3): 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)

Canada – Nunavut

- Fibrous Glass (65997-17-3): 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 fiber)

Canada – Ontario

- Fibrous Glass (65997-17-3): 1 fibres/cm³ TWA_{EV} (respirable, length>5 microns, aspect ratio>= 3.1) (related to Glass wool fibers)

LISTED EXPOSURE LIMITS:

Canada – Quebec

- Fibrous Glass (65997-17-3): 2 fibres/cm³ TWAEV (respirable) (related to Insulation wool fibers, glass wool)

Canada – Yukon

- Fibrous Glass (65997-17-3): 30 mppcf TWA; 10 mg/m³ TWA (respirable mass) (related to Mineral wool fiber)

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL FORM: Solid

APPEARANCE/DESCRIPTION: Fibers assembled into blankets or loose fill. The blankets may be faced with kraft, aluminum foil or other facings.

COLOR: Tan		ODOR: Faint sweet odor	
TASTE: No data available		ODOR THRESHOLD: NDA	
BOILING POINT:	NDA	VAPOR PRESSURE:	NDA
MELTING POINT/FREEZING POINT:	= 2200 F(= 1204 C)	VAPOR DENSITY:	NDA
SPECIFIC GRAVITY:	= 2.5	EVAPORATION RATE:	NDA
DENSITY:	= 20.8625 lbs/gal	VOC (WT.):	NDA
BULK DENSITY:	NDA	VOC (VOL.):	NDA
WATER SOLUBILITY:	Slightly Soluble	VOLATILES (WT.):	NDA
SOLVENT SOLUBILITY:	NDA	VOLATILES (VOL.):	NDA
VISCOSITY:	@	FLASH POINT:	NDA
HALF-LIFE:	NDA	FLASH POINT TEST TYPE:	NDA
OCTANOL/WATER PARTITION COEFFICIENT:	NDA	UEL:	NDA
COEFFICIENT OF WATER/OIL DISTRIBUTION:	NDA	LEL:	NDA
BIOACCUMULATION FACTOR:	NDA	AUTOIGNITION:	NDA
PH:	NDA		

SECTION 10 - STABILITY AND REACTIVITY

STABILITY: Stable under normal conditions.

HAZARDOUS POLYMERIZATION: Hazardous polymerization not indicated.

CONDITIONS TO AVOID: Keep away from heat, ignition sources and incompatible materials.

INCOMPATIBLE MATERIALS: Hydrofluoric acid (7664-39-3)

HAZARDOUS DECOMPOSITION PRODUCTS: Hazardous decomposition may occur generating toxic fumes/vapors, oxides of carbon (COx), oxides of nitrogen (NOx).

SECTION 11 - TOXICOLOGICAL INFORMATION

ACUTE TOXICITY: 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.

CARCINOGENIC EFFECTS: This product contains glass wool insulation fibers. 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."

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 Glass wool) (Possible Select Carcinogen)
IARC:	Monograph 81 [2002] (listed under Man-made mineral fibers), Monograph 43 [1988] (related to Insulation glass wool) (Group 3 (not classifiable))

SECTION 12 - ECOLOGICAL INFORMATION

PRODUCT INFORMATION: 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.

CertainTeed's residential fiber glass insulation batts meet GREENGUARD Emission Standards.

CertainTeed's certification confirms compliance with GREENGUARD Emission Standards, which are based on criteria used by the State of Washington, the U.S. Environmental Protection Agency (EPA), OSHA and the World Health Organization for total particulate and Volatile Organic Compounds (VOC) emissions. Additionally, CertainTeed's residential fiber glass insulation products meet the following emission criteria: California Section CA1350 material specification for schools and offices; OSHA Purchase Specification; State of Washington; EPA; and Proposed State of California. CertainTeed's residential fiber glass insulations also meet the EPA Recovered Material Guideline for recycled content.

ECOLOGICAL FATE: No information available for the product.

PERSISTENCE/DEGRADABILITY: No information available for the product.

SECTION 13 - DISPOSAL CONSIDERATIONS

PRODUCT: 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). See Section 7 for Handling Procedures; see Section 8 for Personal Protective Equipment

recommendations.

SECTION 14 - TRANSPORTATION INFORMATION

U.S. DOT 49 CFR 172.101:

SHIPPING NAME: Not Classified as a Hazardous Material for Transport

TDG - CANADA - TRANSPORT OF DANGEROUS GOODS:

SHIPPING NAME: Not Classified as a Dangerous Good for Transport

SECTION 15 - REGULATORY INFORMATION

SARA HAZARD CLASSIFICATIONS:

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

US FEDERAL:

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.

CERCLA:

This material does not contain chemicals required to be identified under CERCLA (40 CFR 302.4).

STATE REGULATIONS:

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	Yes	Yes	No	Yes	Yes

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:

GENERAL PRODUCT INFORMATION:
Not classified

COMPONENT ANALYSIS - WHMIS IDL:
The following components are identified under the Canadian Hazardous Products Act Ingredient Disclosure List: None

ADDITIONAL REGULATORY INFORMATION:

GENERAL PRODUCT INFORMATION:
No information available for the product.

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
Asphalt	8052-42-4	Yes	Yes	Yes
Hydrotreated heavy paraffinic petroleum distillate (highly refined) -or- Mineral oil, petroleum distillates, solvent-dewaxed heavy paraffinic (mild or no solvent-refining or hydrotreatment)	64742-54-7 or 64742-65-0	Yes	Yes	Yes
Acetic acid, vinyl ester, polymer	9003-20-7	Yes	Yes	No
Acetic acid, ethenyl ester, polymer with ethene, rubber	24937-78-8	Yes	Yes	No

SECTION 16 - OTHER INFORMATION

PREPARATION DATE: 04/21/2010

LAST REVISION DATE: 08/16/2011

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.

For reference to the acronyms/definitions used in this MSDS please visit www.certainteed.com.

This is the end of MSDS # CT 10161-2