



MATERIAL SAFETY DATA SHEET

SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MATERIAL NAME: WEATHERBOARDS™ (FIBERCEMENT SIDING)

COMMON NAME: CELLULOSE FIBERCEMENT, WEATHERBOARDS, SHAPES, LAP, VERTICAL, SOFFIT, UNDERLAYMENT, BACKERBOARD

PRODUCT USE: BUILDING MATERIALS FOR BUILDING EXTERIORS (SIDING OR SOFFIT) OR UNDERLAYMENT

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

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: 2/24/1998
LAST REVISION DATE: 8/17/2009

SECTION 2 - HAZARDS IDENTIFICATION

Emergency Overview

Under United States Regulations (29 CFR 1900.1200 - Hazard Communication Standard) the products listed above are exempt as articles under stated normal conditions of use. In Canada, these products are considered manufactured articles under the Workplace Hazardous Materials Information System (WHMIS) and are exempt. The component exposure limits and other information in this document are provided for circumstances such as cutting, sanding and/or grinding when there is a potential for exposure to these components.

If cut, dusts generated from this product may cause temporary irritation to the upper respiratory system. Avoid inhalation as temporary irritation may occur. Mechanical irritation may occur. Wear appropriate personal protective equipment as described in Section 8.

GHS

Temporary respiratory irritation may occur. Avoid breathing dusts. Contaminated work clothing should not be allowed out of the workplace. Wash thoroughly after handling. Wear protective gloves and NIOSH approved respirator if exposed to dust or if material is heated.



NFPA/HMIS RATINGS:

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

PHYSICAL FORM: Solid boards

COLOR: Gray

ODOR: None

HAZARDS: Mild/Slight Irritant; Mechanical Irritant

ROUTE OF ENTRY: Inhalation

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Pre-existing lung conditions which may be aggravated if fumes/dusts are inhaled.

POTENTIAL HEALTH EFFECTS: Under normal conditions of use these products are not expected to cause a physical hazard or health risk to humans.

INHALATION:

ACUTE (IMMEDIATE): Temporary irritation of nose, throat, and airways may occur causing coughing and/or sneezing.

CHRONIC (DELAYED): This product contains crystalline silica (quartz) which is listed by IARC as a suspect carcinogen. Silicosis (pulmonary fibrosis or severe lung scarring) may occur if exposed to high levels or repeated encounters with dust. Exposure to airborne particles that exceed the limits listed may cause lung cancer.

SKIN:

ACUTE (IMMEDIATE): Dust or powder may result in mechanical irritation of the skin characterized by itching or redness. Rubbing skin may increase irritation.

CHRONIC (DELAYED): No data available

EYE:

ACUTE (IMMEDIATE): Mechanical irritation of the eye may occur characterized by itching or redness. Rubbing may cause abrasion of cornea.

CHRONIC (DELAYED): No data available

INGESTION:

ACUTE (IMMEDIATE): Ingestion of this product is unlikely. If ingestion occurs, irritation of the gastrointestinal tract may occur.

CHRONIC (DELAYED): No data available

MUTAGENIC EFFECTS: None

CARCINOGENIC EFFECTS: CARCINOGENIC EFFECTS: When used under normal conditions, this product is not considered a carcinogen.

This product contains crystalline silica, quartz (14808-60-7) as well as Limestone (1317-65-3). IARC Monographs on Evaluation of Carcinogenic Risk of Chemicals to Humans (Monograph 68, 1997) concludes that there is sufficient evidence for the carcinogenicity of crystalline to humans, IARC (Group I). Crystalline Silica and Limestone are classified as a Known Carcinogen according to the NTP.

REPRODUCTIVE EFFECTS: None

OTHER HEALTH EFFECTS: None

See Section 12 for Ecological Information

SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

Composition/Information on Ingredients

Chemical Name	CAS	%(weight)	UN;EINICS
Silicic acid, calcium salt	1344-95-2	30% TO 80%	215-710-8
Calcium aluminum silicates	NDA	0% TO 50%	NDA
Calcium carbonate, limestone	1317-65-3	0% TO 30%	215-279-6
Cellulose	65996-61-4	5% TO 10%	265-995-8
Iron oxide compounds	NDA	0% TO 10%	NDA
Silica, crystalline - quartz	14808-60-7	0% TO 5%	238-878-4
Magnesium(II) carbonate (1:1)	546-93-0	0.5% TO 0.6%	208-915-9
Silica, crystalline - fused	60676-86-0	0.4% TO 0.5%	262-373-8

Under United States Regulations (29 CFR 1900.1200 - Hazard Communication Standard) the products listed above are exempt as articles under stated normal conditions of use. In Canada, these products are considered manufactured articles under the Workplace Hazardous Materials Information System (WHMIS) and are exempt.

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: Remove contaminated clothing and wash exposed skin with soap and water. If irritation develops or persists, seek medical attention.

EYE: If foreign matter enters eyes, immediately flush with large amounts of water for at least 15 minutes or until irritation subsides. Do not rub or scratch your eyes, dust particles may cause the eye to be scratched. If irritation persists, contact a physician.

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 methods suitable for the surrounding fire.

UNSUITABLE EXTINGUISHING MEDIA: Not applicable.

FIREFIGHTING PROCEDURES: This product is not considered combustible and will not burn. Use methods suitable for the surrounding fire. Firefighters should wear full-face, self contained breathing apparatus and impervious protective clothing to avoid smoke inhalation and lack of oxygen.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Not applicable.

HAZARDOUS COMBUSTION PRODUCTS: This product is not considered combustible.

FLASH POINT: NA

FLASH POINT TEST TYPE: N/A

EXPLOSION LIMITS

UPPER: N/A LOWER: N/A

SECTION 6 - ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS: Wear a dust mask if dust is generated above exposure limits. Wear appropriate protective equipment and clothing during clean-up.

EMERGENCY PROCEDURES: Not applicable

CONTAINMENT/CLEAN-UP MEASURES: Pick up large pieces. Vacuum dust using a high-efficiency particulate air (HEPA) filtered vacuum. If sweeping is necessary, use a dust suppressant such as water. These procedures will help to minimize potential exposures. Do not dry sweep dust accumulation. These procedures will help to minimize potential exposures. Scoop up material and put into a suitable container for disposal as a non-hazardous waste.

SECTION 7 - HANDLING AND STORAGE

HANDLING: Do not breathe dusts or fumes generated from cutting or heating this material. Use this product with adequate ventilation. Always wash work clothes separately from 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: Use a NIOSH approved/certified respirator (dust mask) or air-purifying cartridge respirator fitter with N, P, or R series filters.

EYE/FACE PROTECTION: Safety glasses with side shields should be worn at a minimum.

SKIN/BODY PROTECTION: Leather or cotton gloves may be worn to prevent skin contact and irritation. Normal work clothing (long sleeved shirts and long pants) is recommended.

GENERAL INDUSTRIAL HYGIENE CONSIDERATIONS: Keep formation of airborne dusts to a minimum. Use good industrial hygiene practices in handling this material.

ENGINEERING MEASURES/CONTROLS: Keep exposures to dust generated from cutting, drilling, routing, sawing or crushing, as low as possible. Whenever possible, perform machining of boards in a well-ventilated area (outside) and use local exhaust ventilation to keep exposures below the recommended exposure limits. Whenever possible, use wet saws or saw blades designed for fiber cement. The “score and snap” method or the use of pneumatic/electric shears are work practices which minimize dust exposure.

LISTED EXPOSURE LIMITS:

US STATE CALIFORNIA

- Silicic acid, calcium salt (1344-95-2) : **PELs:** (10 mg/m3 PEL (total dust); 5 mg/m3 PEL (respirable fraction, listed under Particulates not otherwise regulated))
- Silica, crystalline - fused (60676-86-0) : **PELs:** (0.1 mg/m3 PEL (respirable dust))
- Silica, crystalline - quartz (14808-60-7) : **PELs:** (0.3 mg/m3 PEL (total dust); 0.1 mg/m3 PEL (respirable dust))

United States - OSHA

- Silicic acid, calcium salt (1344-95-2) : **TWAs (Final PELs):** (15 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable fraction)) | **TWAs (Vacated PELs):** (15 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable fraction))
- Calcium carbonate (1317-65-3) : **TWAs (Final PELs):** (15 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable fraction)) | **TWAs (Vacated PELs):** (15 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable fraction))
- Magnesium(II) carbonate (1:1) (546-93-0) : **TWAs (Final PELs):** (15 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable fraction)) | **TWAs (Vacated PELs):** (15 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable fraction))
- Silica, crystalline - fused (60676-86-0): **Mineral Dusts:** (20 mppcf TWA; ((80)/(% SiO2) mg/m3 TWA (respirable dust))) | **TWAs (Vacated PELs):** (0.1 mg/m3 TWA (respirable dust))
- Silica, crystalline - quartz (14808-60-7) : **Mineral Dusts:** (((250)/(% SiO2 + 5) mppcf TWA (respirable)); ((10)/(% SiO2 + 2) mg/m3 TWA (respirable)); ((30)/(% SiO2 + 2) mg/m3 TWA (total dust))) | **TWAs (Vacated PELs):** (0.1 mg/m3 TWA (respirable dust))

United States - ACGIH

- Silicic acid, calcium salt (1344-95-2) : **TWAs:** (10 mg/m3 TWA (synthetic nonfibrous, particulate matter containing no asbestos and <1% crystalline silica)) | **Carcinogens:** (A4 - Not Classifiable as a Human Carcinogen (synthetic nonfibrous)) | **TLV Basis - Critical Effects:** (upper respiratory tract irritation (synthetic nonfibrous))
- Silica, crystalline - quartz (14808-60-7) : **TWAs:** (0.025 mg/m3 TWA (respirable fraction)) | **Carcinogens:** (A2 - Suspected Human Carcinogen) | **TLV Basis - Critical Effects:** (lung cancer; pulmonary fibrosis)

United States - NIOSH

- Silicic acid, calcium salt (1344-95-2) : **TWAs:** (10 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable dust))
- Calcium carbonate (1317-65-3) : **TWAs:** (10 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable dust))
- Magnesium(II) carbonate (1:1) (546-93-0) : **TWAs:** (10 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable dust))
- Silica, crystalline - quartz (14808-60-7) : **TWAs:** (0.05 mg/m3 TWA (respirable dust)) |

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL FORM: Solid boards

APPEARANCE/DESCRIPTION: Solid gray boards with varying dimensions according to product specifications. Some may be coated with an acrylic primer.

COLOR: Gray		ODOR: None	
TASTE: Not applicable (NA)		ODOR THRESHOLD: NDA	
BOILING POINT:	NDA	VAPOR PRESSURE:	NDA
MELTING POINT/FREEZING POINT:	NDA	VAPOR DENSITY:	NDA
SPECIFIC GRAVITY:	NDA	EVAPORATION RATE:	NDA

DENSITY:	NDA	VOC (WT.):	NDA
BULK DENSITY:	NDA	VOC (VOL.):	NDA
WATER SOLUBILITY:	Insoluble	VOLATILES (WT.):	NDA
SOLVENT SOLUBILITY:	NDA	VOLATILES (VOL.):	NDA
VISCOSITY:	NDA	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 will not occur.

CONDITIONS TO AVOID: Avoid the generation and dispersion of dusts.

INCOMPATIBLE MATERIALS: None known.

HAZARDOUS DECOMPOSITION PRODUCTS: None known.

SECTION 11 - TOXICOLOGICAL INFORMATION

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, mutagens, reproductive hazards and respiratory sensitizers.

ACUTE TOXICITY: This product is not toxic in its intact form. Temporary irritation may be observed in the upper respiratory system, eyes, and skin. Inhalation of dusts/fumes from this product may cause a scratchy throat, congestion, and slight coughing.

CARCINOGENIC EFFECTS: Components of the product have been identified as carcinogens by IARC, NIOSH, and ACGIH.

COMPONENT CARCINOGENICITY:

Crystalline Silica, Quartz (14808-60-7):

NTP:	Reasonably Anticipated to be a human carcinogen (1992; <u>Sixth Annual Report on Carcinogens</u>)
IARC:	Group 2A – Limited Evidence of human carcinogenicity (IARC Monographs on Evaluation of Carcinogenic Risk of Chemicals to Humans [volume 42, 1987])
ACGIH:	A2 – Suspected human carcinogen
NIOSH:	Potential occupational carcinogen.

Limestone (1317-65-3):

NTP:	Reasonably Anticipated to be a human carcinogen (1992; <u>Sixth Annual Report on Carcinogens</u>)
IARC:	Group 2A – Limited Evidence of human carcinogenicity (IARC Monographs on Evaluation of Carcinogenic Risk of Chemicals to Humans [volume 42, 1987])
ACGIH:	A2 – Suspected human carcinogen
NIOSH:	Potential occupational carcinogen.

Silica, fused (60676-86-0):

IARC:	Group 3 (not classifiable) Monograph 68, 1997
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SECTION 12 - ECOLOGICAL INFORMATION

PRODUCT INFORMATION: This product has not been tested. No information is available for the product. The product is not biodegradable.

ECOLOGICAL FATE: No information available for the product.

PERSISTANCE/DEGRADABILITY: No information available for the product.

SECTION 13 - DISPOSAL CONSIDERATIONS

PRODUCT: This product, as supplied, is not regulated as a hazardous waste by the U.S. Environmental Protection Agency (EPA) under Resource Conservation and Recovery Act (RCRA) regulations. Comply with state and local regulations for disposal. If you are unsure of the regulations, contact your local public health department, or the local office of the EPA.

DISPOSAL: Dispose of waste material according to local, state, federal, and provincial environmental regulations.

SECTION 14 - TRANSPORTATION INFORMATION

U.S. DOT 49 CFR 172.101:

SHIPPING NAME: Not Regulated for Transportation

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: Yes 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.

TSCA (Toxic Substances Control Act) - Section 8(a)

- Silicic acid, calcium salt (1344-95-2) XU
- Cellulose (65996-61-4) XU
- Calcium carbonate (1317-65-3)
- Magnesium(II) carbonate (1:1) (546-93-0)
- Silica, crystalline - fused (60676-86-0)
- Silica, crystalline - quartz (14808-60-7)

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
Limestone as related to Silica, Quartz	1317-65-3	No	Yes	Yes	Yes	Yes	Yes
Silica Crystalline, Quartz	14808-60-7	No	Yes	Yes	No	Yes	Yes
Magnesium carbonate	546-93-0	No	Yes	Yes	No	No	Yes
Silica, fused	60676-86-0	No	Yes	Yes	Yes	No	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 and birth defects, or other reproductive harm.

CANADIAN WHMIS INFORMATION:

GENERAL PRODUCT INFORMATION:

In Canada, these products are considered manufactured articles under the Workplace Hazardous Materials Information System (WHMIS) and are exempt.

COMPONENT ANALYSIS - WHMIS IDL:

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

- Silica, crystalline - fused (60676-86-0) 1 %
- Silica, crystalline - quartz (14808-60-7) 1 %

ADDITIONAL REGULATORY INFORMATION:

GENERAL PRODUCT INFORMATION:

No information available for the product.

COMPONENT ANALYSIS – INVENTORY:

Component	CAS #	TSCA	DSL	EINECS
Cellulose pulp	65996-61-4	Yes	Yes	Yes
Silica Crystalline Quartz	14808-60-7	Yes	Yes	Yes
Limestone, Calcium carbonate	1317-65-3	Yes	No	Yes
Magnesium carbonate	546-93-0	Yes	Yes	Yes
Silica, fused	60676-86-0	Yes	Yes	Yes

SECTION 16 - OTHER INFORMATION

PREPARATION DATE: 2/24/1998

LAST REVISION DATE: 8/17/2009

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.

MSDS HISTORY:

MSDS REVISION SUMMARY:

Date	MSDS No.	Changes
8/17/2009	CT-10074-5	<ul style="list-style-type: none"> • MSDS format change (new ANSI Z400.2004 & GHS v .2007 format) • Section 2 – GHS (v. 2007) Classifications
03/19/2006	CT 10074-4	<ul style="list-style-type: none"> • Revised component percentages
09/27/2005	CT 10074-3	<ul style="list-style-type: none"> • Revised for new formulation with Calcium Aluminum Silicates
6/14/02003	CT 10074-2	<ul style="list-style-type: none"> • Adopted ANSI format, inserted WHMIS information, updated ACGIH TLV, IARC and NTP information and created French version for Canada.
2/24/98	CT 10074-1	<ul style="list-style-type: none"> • Original

This is the end of MSDS # CT-10074-5