# Material Safety Data Sheet

CertainTeed E

Н	Health	2
M	Fire	0
I	Reactivity	0
S	Other	

MSDS Number: CT 10074-4 DATE PREPARED: March 19, 2006

# 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**Product/Trade Name:** WeatherBoards™ (FiberCement Siding)

Chemical Name: Mixture CAS #: None Assigned

Common Name: Cellulose FiberCement, WeatherBoards, Shapes, Lap, Vertical, Soffit,

Underlayment, Backerboard

Product Use: Building materials for building exteriors (siding or soffit) or underlayment

## MANUFACTURER INFORMATION:

CertainTeed Corporation Main Telephone: (800)274-8530 P.O. Box 860 Health, Safety & Environmental Affairs Valley Forge, PA 19482-0101 (610) 341-7000 (9 AM – 5 PM Eastern)

EMERGENCY TELEPHONE: CHEMTREC (800) 424-9300

## 2. COMPOSITION / INFORMATION ON INGREDIENTS

CAS#	Component	Percent
1344-95-2	Calcium Silicate (hydrate)	30-80
Not Available	Calcium Aluminum Silicates	0-40
1317-65-3	Limestone	0-30
65996-61-4	Pulp (cellulose)	5-10
Not Available	Iron Oxide Compounds	0-10
14808-60-7	Quartz	0-5
546-93-0	Magnesium Carbonate	0.5-0.6
60676-86-0	Silica, fused	0.4-0.5

## **Component Related Regulatory Information**

This product may be regulated, have exposure limits or other information identified as the following: Quartz (14808-60-7).

# **Component Information/Information on Non-Hazardous Components**

This material is considered an "article" under 29 CFR 1910.1200 (Hazard Communication) and Canadian Controlled Product Regulations. The information in this MSDS is provided for situations where this article may be deformed creating dusts or fumes which may be potentially hazardous.

The actual weight percentage ranges for chemical components were used, rather than using the WHMIS- mandated ranges.

## 3. HAZARD IDENTIFICATION

Routes of Exposure: Inhalation, skin, and eye contact.

**Potential Health Effects: Eyes** 

Dust or powder may irritate eye tissue. Rubbing may cause abrasion of cornea.

Potential Health Effects: Skin

Dust or powder may irritate the skin. Mechanical rubbing may increase skin irritation.

## **Potential Health Effects: Ingestion**

Ingestion of this product is not likely to occur under normal conditions of use. If ingestion occurs, irritation of the gastrointestinal tract may occur.

#### Potential Health Effects: Inhalation

Acute Inhalation: Dust may cause temporary irritation of the nose, throat, and airways, resulting in coughing and/or sneezing. As with any dust, pre-existing upper respiratory and lung diseases or conditions may be aggravated. Actual lung injury from acute exposure is rare but possible. Symptoms of acute silicosis are similar to chronic silicosis (below) but may also inlcude weight loss and fever.

Chronic Inhalation: Repeated or prolonged overexposures to dust containing crystalline silica may result in chest pain, difficulty breathing, lung damage and silicosis. Silicosis is the permanent deposition of silica in lung tissue which may result in lung damage. There may exist a relationship between silicosis and certain cancers.

# **Medical Conditions Aggravated by Exposure**

As with any dust, pre-existing upper respiratory and lung diseases or conditions may be aggravated.

HMIS Ratings: Health: 2\* Fire: 0 Physical Hazard: 0

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

## 4. FIRST AID MEASURES

# First Aid: Eyes

Do not rub or scratch your eyes. Dust particles may cause the eye to be scratched. Flush eyes with large amounts of water for 15 minutes. If irritation persists, contact a physician.

## First Aid: Skin

Wash gently with soap and warm water to remove dust. Wash hands before eating or using the restroom. If irritation persists, seek medical attention.

# First Aid: Ingestion

Due to the physical nature of this material, ingestion is unlikely to occur. If ingestion of a large amount does occur, seek medical attention.

# First Aid: Inhalation

If inhaled, remove the affected person to fresh air. If shortness of breath or wheezing develops, seek medical attention.

## 5. FIRE FIGHTING MEASURES

## **General Fire Hazards**

See Section 9 for Flammability Properties. This material will not burn.

#### **Hazardous Combustion Products**

Product is not considered combustible.

# **Extinguishing Media**

Use methods suitable for the surrounding fire.

# Fire Fighting Equipment/Instructions

Firefighters should wear appropriate protective clothing.

NFPA Ratings: Health: 2 Fire: 0 Reactivity: 0

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

# 6. ACCIDENTAL RELEASE MEASURES

# **Containment Procedures**

Pick up large pieces. Vacuum dusts using a high-efficiency particulate air (HEPA) filtered vacuum. If sweeping is necessary, use a dust suppressant such as water. Do not dry sweep dust accumulation. These procedures will help to minimize potential exposures.

# **Clean-Up Procedures**

Avoid the generation of dusts during clean-up. Wear a dust mask if dust is generated above exposure limits. Wear appropriate protective equipment and clothing during clean-up. Pick up or scoop up material and put into a suitable container for disposal as a non-hazardous waste.

## **Evacuation Procedures**

None expected.

# **Special Procedures**

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

#### 7. HANDLING AND STORAGE

# **Handling Procedures**

Avoid breathing dusts from this material. Customary personal hygiene measures, such as washing hands after working with these products, are recommended.

# **Storage Procedures**

Warehouse storage should be in accordance with package directions, if any.

## 8. EXPOSURE CONTROL / PERSONAL PROTECTION

## **Component Exposure Limits**

# Calcium silicate hydrate (1344-95-2)

ACGIH: 10 mg/m<sup>3</sup> TWA (total dust)

OSHA: 15 mg/m<sup>3</sup> TWA (total dust); 5 mg/m<sup>3</sup> TWA (respirable fraction) NIOSH: 10 mg/m<sup>3</sup> TWA (total dust); 5 mg/m<sup>3</sup> TWA (respirable dust)

#### Limestone (1317-65-3)

ACGIH: 0.05 mg/m<sup>3</sup> TWA (respirable fraction) (related to Silica, crystalline, quartz)

OSHA: 15 mg/m³ TWA (total dust); 5 mg/m³ TWA (respirable fraction) NIOSH: 10 mg/m³ TWA (total dust); 5 mg/m³ TWA (respirable dust)

## Quartz (14808-60-7)

ACGIH: 0.05 mg/m<sup>3</sup> TWA (respirable fraction) OSHA: Calculated based on % silica present NIOSH: 0.05 mg/m<sup>3</sup> TWA (respirable dust)

# Magnesium carbonate (546-93-0)

ACGIH: 10 mg/m<sup>3</sup> TWA (particulate matter containing no asbestos and < 1% crystalline silica)

OSHA: 15 mg/m<sup>3</sup> TWA (total dust); 5 mg/m<sup>3</sup> TWA (respirable fraction) NIOSH: 10 mg/m<sup>3</sup> TWA (total dust); 5 mg/m<sup>3</sup> TWA (respirable dust)

# Silica, fused (60676-86-0)

ACGIH: 0.1 mg/m³ TWA (respirable fraction)
OSHA: Calculated based on % silica present
NIOSH: 0.05 mg/m3 TWA (respirable dust)

Note: State-run OSHA programs may use 0.1 mg/m3 (respirable dust containing silica) for

the state-specific OSHA PEL.

# **Engineering 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.

#### PERSONAL PROTECTIVE EQUIPMENT

#### Personal Protective Equipment: Eyes/Face

Safety glasses with side shields may be worn to reduce the risk of eye injury as a result of construction activities.

# Personal Protective Equipment: Skin

Wear leather or other appropriate work gloves, if necessary, for type of operation to prevent skin contact or irritation.

# Personal Protective Equipment: Respiratory

Wear NIOSH-approved disposable respirator (dust mask) or air-purifying cartridge respirator fitted with N,P, or R series filters.

# **Personal Protective Equipment: General**

Keep formation of airborne dusts to a minimum. Use good personal hygiene practices in handling this material.

#### 9. PHYSICAL AND CHEMICAL PROPERTIES

**Appearance:** Solid gray boards with varying **Odor:** None

dimensions according to product specifications. Some may be coated with an acrylic primer.

**Physical State:** Solid Not Applicable pH: Vapor Pressure: Not Applicable Vapor Density: Not Applicable Boiling Point: Not Applicable **Melting Point:** Not Applicable Solubility (H2O): Not Applicable Specific Gravity: Not Applicable Flash Point: Not Applicable Flash Point Method: Not Applicable Lower Flammability Not Applicable **Upper Flammability** Not Applicable

Limit: Limit:

Auto Ignition Temp.: Not Applicable Burning Rate: Not Applicable

#### 10. CHEMICAL STABILITY AND REACTIVITY INFORMATION

# **Chemical Stability**

This is a stable material.

## Chemical Stability: Conditions to Avoid

Avoid dispersion of dust in air.

#### Incompatibility

None identified.

# **Hazardous Decomposition**

None identified.

# **Possibility of Hazardous Reactions**

None.

## 11. TOXICOLOGICAL INFORMATION

## **Acute Dose Effects**

#### **General Product Information**

This product is not toxic in its intact form. The dusts from this product are mechanical irritants and may cause transitory irritation to exposed areas such as eyes, skin, and upper respiratory passages.

# Carcinogenicity

#### **General Product Information**

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

# **Component Carcinogenicity**

## Limestone (1317-65-3)

ACGIH: A2 - Suspected Human Carcinogen (related to Silica, crystalline, quartz)

NIOSH: potential occupational carcinogen (related to Silica, crystalline)

IARC: Monograph 68, 1997 (Listed under Crystalline silica, inhaled in the form of quartz or cristobalite

from occupational sources) (related to Silica, quartz) (Group 1 (carcinogenic to humans))

## Quartz (14808-60-7)

ACGIH: A2 - Suspected Human Carcinogen NIOSH: potential occupational carcinogen

IARC: Monograph 68, 1997 (Listed under Crystalline silica, inhaled in the form of quartz or cristobalite

from occupational sources) (Group 1 (carcinogenic to humans))

# Silica, fused (60676-86-0)

IARC: Monograph 68, 1997 (Listed under Amorphous silica) (Group 3 (not classifiable))

#### Mutagenicity

No information available for the product

#### **Teratogenicity**

No information available for the product

## **Developmental Effects**

No information available for the product

#### 12. ECOLOGICAL INFORMATION

## **Ecotoxicity**

# **General Product Information**

No information available for the product. The product is not biodegradable.

## Component Analysis - Ecotoxicity - Aquatic Toxicity

No ecotoxicity data are available for this product's components.

#### **Environmental Fate**

No information available for the product.

# 13. WASTE DISPOSAL CONSIDERATIONS

# **US EPA Waste Number & Descriptions**

# **General Product Information**

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.

## **Component Waste Numbers**

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

## **Disposal Instructions**

Dispose of waste material according to Local, State, Federal, and Provincial Environmental Regulations. See Section 7 for Handling Procedures and Section 8 for Personal Protective Equipment recommendations.

#### 14. TRANSPORTATION INFORMATION

# **US DOT Information**

**Shipping Name:** This product is not classified a hazardous material for transport.

# **TDG Information**

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

## **International Transportation Regulations**

Not regulated.

#### 15. REGULATORY INFORMATION

# **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**

None of the components of this product are listed under CERCLA (40 CFR 302.4) and present in the material at an amount exceeding the Reportable Quantity (RQ).

## State Regulations

# **General Product Information**

Other state regulations may apply. Check individual state requirements.

# **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 (1related to Silica,	1317-65-3	No	Yes	Yes	Yes <sup>1</sup>	Yes	Yes
Quartz)							
Quartz	14808-60-7	No	Yes	Yes	Yes	Yes	No
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.

## **Canadian WHMIS Information**

## **General Product Information**

This product is not a Controlled Product according to the Canadian Hazardous Products Act.

# **Component Analysis - WHMIS IDL**

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

Component	CAS#	Minimum Concentration
Limestone	1317-65-3	1 % (related to Silica-crystalline, quartz)
Quartz	14808-60-7	1 %

# **Additional Regulatory Information**

#### **General Product Information**

No additional information available.

## **Component Analysis – Inventory**

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

# 16. ADDITIONAL COMMENTS

## Other Information

The information herein is presented in good faith and believed to be accurate as of the effective date given. However, no warranty, expressed or implied, is given. It is the buyer's responsibility to ensure that its activities comply with Federal, State or provincial, and local laws.

Disclaimer: 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 No: Chemical Abstracts Services Number;

CERCLA Comprehensive Environmental Response, Compensation and Liability Act;

CFR Code of Federal Regulations;
EPA Environmental Protection Agency;
f/cc Fibers per cubic centimeter;
g/cm3 Grams per cubic centimeter;

HMIS Hazardous Material Identification System;
IARC International Agency for Research on Cancer;

LC50 Lethal concentration that produces death in 50% of the test population; LD50 Lethal dose required to produce death in 50% of the test population;

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;

PNOC Particulates Not Otherwise Classified; 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>	MSDS No.	Comments
03/19/2006	CT 10074-4	Revised component percentages
09/27/2005	CT 10074-3	Revised for new formulation with Calcium Aluminum Silicates
6/14/02003	CT 10074-2	Adopted ANSI format, inserted WHMIS information, updated ACGIH TLV, IARC and NTP inforamtion and created French version for Canada.
2/24/98	CT 10074-1	Original

This is the end of MSDS # CT 10074-4