

Material Safety Data Sheet



DATE PREPARED: JUNE 14, 2003

MSDS Number: CT 10074-2

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

CHEMICAL PRODUCT IDENTIFICATION

Product/Trade Name: WeatherBoards™ (FiberCement Siding)
Chemical Name: Mixture
CAS NO: None Assigned
Common Name: Cellulose Fiber Cement, WeatherBoards, Shapes, Lap, Vertical, Soffit, Underlayment, Backerboard.
Product use: Building materials for building exteriors (siding or soffit) or underlayment.

MANUFACTURER INFORMATION

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

Phone: Main Number 800-274-8530
 Safety and Environmental Affairs: 610-341-7482
 9 am – 5 pm (USA Eastern Standard Time)

EMERGENCY TELEPHONE: CHEMTREC 800-424-9300

2. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name: Calcium silicate (hydrate)
CAS NO: 1344-95-2
Percent in Product: 30-55%
Exposure Limits:

| <u>OSHA PEL</u> | <u>ACGIH TLV-TWA</u> | <u>NIOSH REL</u> |
|------------------------|------------------------|------------------------|
| 15 mg/m ³ * | 10 mg/m ³ * | 10 mg/m ³ * |
| 5 mg/m ³ ** | | 5 mg/m ³ ** |
| *total dust | | |
| ** respirable dust | | |

Chemical Name: Crystalline silica (quartz)
CAS NO: 14808-60-7
Percent in Product: 45-55%
Exposure Limits:

| <u>OSHA PEL</u> | <u>ACGIH TLV-TWA</u> | <u>NIOSH REL</u> |
|--|------------------------|------------------------|
| 10 mg/m ³ | 0.05 mg/m ³ | 0.05 mg/m ³ |
| %SiO ₂ +2 (respirable dust containing silica) | (respirable) | (respirable) |

NOTE: State-run OSHA programs may use 0.1 mg/m³ (respirable dust containing silica) for the state-specific OSHA PEL.

2. COMPOSITION/INFORMATION ON INGREDIENTS (Continued)

| | | | |
|----------------------------|----------------------------|------------------------|------------------------|
| Chemical Name: | Unbleached cellulose fiber | | |
| CAS NO: | 9004-34-6 | | |
| Percent in Product: | 5-15% | | |
| Exposure Limits: | <u>OSHA PEL</u> | <u>ACGIH TLV-TWA</u> | <u>NIOSH REL</u> |
| | 15 mg/m ³ * | 10 mg/m ³ * | 10 mg/m ³ * |
| | 5 mg/m ³ ** | | 5 mg/m ³ ** |
| | *total dust | | |
| | ** respirable dust | | |

| | | | |
|----------------------------|--|------------------------|------------------------|
| Chemical Name: | Hydrous aluminum silicate (kaolin or ball clay) | | |
| CAS NO: | 1332-58-7 | | |
| Percent in Product: | 2-8% | | |
| Exposure Limits: | <u>OSHA PEL</u> | <u>ACGIH TLV-TWA</u> | <u>NIOSH REL</u> |
| | 15 mg/m ³ * | 2 mg/m ³ ** | 10 mg/m ³ * |
| | 5 mg/m ³ ** | | 5 mg/m ³ ** |
| | *total dust | | |
| | ** respirable dust | | |
| | ***respirable dust containing no asbestos and <1% crystalline silica | | |

ADDITIONAL INFORMATION ON INGREDIENTS

This product does not contain any form of asbestos.
 Actual component ranges are listed.

3. HAZARDS IDENTIFICATION

| | <u>Health</u> | <u>Flammability</u> | <u>Reactivity</u> | <u>Degree of Hazard</u> |
|---------------------|---------------|---------------------|-------------------|-----------------------------|
| NFPA Rating: | 0 | 0 | 0 | 0 - Minimal (Insignificant) |
| HMIS Rating: | 2* | 0 | 0 | 1 - Slight (Minor) |
| | | | | 2 - Moderate |
| | | | | 3 - Serious (High) |
| | | | | 4 - Severe (Extreme) |

*Denotes chronic hazard
 (see section 16 for acronym definitions)

POTENTIAL HEALTH EFFECTS AND SYMPTOM OF EXPOSURE

Primary Routes of Entry: Inhalation

Acute Inhalation: Dust may cause temporary irritation of the nose, throat, and airways, resulting in coughing and/or sneezing. Certain susceptible individuals (asthmatics) may experience wheezing (spasms of the bronchial airways) after inhalation of dust during sanding or sawing operations. Actual lung injury from acute exposure is rare but possible. Symptoms of acute silicosis are similar to chronic silicosis (below) but may also include weight loss and fever.

Chronic Inhalation: Repeated or prolonged overexposures to dust containing crystalline silica may cause silicosis and increases the risk of bronchitis, tuberculosis, lung cancer, renal disease and scleroderma. Cigarette smoking is likely to increase the risk of silicosis, bronchitis, and lung cancer in individuals also chronically exposed to crystalline silica. If chronic silicosis is present, individual may experience shortness of breath, wheezing, cough, and sputum production. Symptoms of scleroderma include thickening and stiffness of skin, particularly in the fingers, shortness of breath, difficulty swallowing and joint problems. Regarding cellulose fiber, based on limited animal research, it is possible that repeated instillation (injection into the lung tissue) of cellulose fiber over time might lead to scarring and inflammation of lung tissue. Mechanical alteration of the cellulose fiber occurs when the product is machined. Therefore, CertainTeed WeatherBoards have a low potential to release fibers with critical fibrous dimensions. Precautions taken for crystalline silica will protect against any risk associated with cellulose or cellulose fibers.

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3. HAZARDS IDENTIFICATION (Continued)

Acute & Chronic Skin Contact: Dust can act as a mechanical irritant.

Acute & Chronic Eye Contact: Dust may irritate the eyes from mechanical abrasion causing watering and redness.

Acute & Chronic Ingestion: Very unlikely under normal conditions of use. If ingestion of dust did occur, irritation of mouth and gastrointestinal tract is likely.

Carcinogenicity:

NTP: Crystalline silica is classified as a human carcinogen, Group K.

IARC: Crystalline silica studies provide sufficient evidence of carcinogenicity in animals and strong evidence in humans, GROUP 1.

OSHA: OSHA does not classify crystalline silica as a carcinogen.

ACGIH: Crystalline silica is a suspected human carcinogen, A3.

Mutagenicity: Dust from this product is not expected to be mutagenic.

Teratogenicity: Dust from this product is not expected to be teratogenic.

Reproductive Toxicity: Dust from this product is not expected to cause any reproductive toxicity.

Toxicological Synergistic Products: None known.

Medical Conditions Aggravated by Exposure: Inhalation of fiber cement dust will aggravate individuals with pre-existing lung conditions (e.g. bronchitis, emphysema, chronic obstructive pulmonary disease, asthma).

Other Potential Health Risks: Cellulose dust may aggravate pre-existing respiratory conditions or allergies.

4. FIRST AID MEASURES

Under normal conditions of use, this product is not expected to create any unusual emergency hazards.

Inhalation: Remove individual to fresh air. If shortness of breath or wheezing develops, seek medical attention.

Skin Contact: Wash with mild soap and water.

Eye Contact: Flush with running water or saline for at least 15 minutes. Do not rub or scratch your eyes. Seek medical attention if redness persists or if visual changes occur.

Ingestion: This product is not intended or reasonably anticipated to be ingested. If swallowed, dilute by drinking large amounts of water. Do not induce vomiting. Seek medical attention.

5. FIRE FIGHTING MEASURES

CertainTeed WeatherBoards will not burn.

6. ACCIDENTAL RELEASE MEASURES

Spills: Collect material and dispose of in an approved non-hazardous waste landfill.

Accidental Releases: Good housekeeping and engineering controls should be utilized to minimize airborne dust created from the machining of fiber cement boards.

Personal Protective Equipment: Wear protective eye wear and respirators during dust clean-up as required to maintain exposure below applicable exposure limits.

7. HANDLING AND STORAGE

There are no special requirements for storage and transport of this product.

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8. EXPOSURE CONTROL / PERSONAL PROTECTION

Work Practices and Engineering Controls: Keep exposure 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). 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

When cutting, drilling, routing or sanding the product, suitable personal protective equipment must be worn.

Respirators: NIOSH-approved disposable respirator (dust mask) or air-purifying cartridge respirator fitted with N (non-oil) series filters.

Eye Protection: ANSI-approved safety glasses with side shields.

Hearing Protection: Earplugs or earmuffs are recommended to protect against peak noise or cumulative noise (when frequent cutting is performed during an eight-hour day).

9. PHYSICAL AND CHEMICAL PROPERTIES

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

Physical State: Solid

pH: N/A

Boiling Point (°F): N/A

Vapor Density (Air=1): N/A

Melting Point (°F): N/A

Specific Gravity (H₂O=1): N/A

Softening Point (°F): N/A

Evaporative Rate (ethyl ether=1): N/A

Freezing Point (°F): N/A

Vapor Pressure (mmHg@20°C): N/A

Odor: none

% Volatile by Volume: N/A

% Solubility: N/A

10. REACTIVITY

Stability: Stable

Corrosivity: Non-corrosive

Incompatibility: No known incompatibilities.

Reactivity: Inert

Reactivity with water: Non-reactive.

Hazardous Decomposition Products: None expected.

11. TOXICOLOGICAL INFORMATION

This product has not been tested as a separate entity. Therefore, the hazards must be evaluated on the basis of individual components, and those hazards that affect the same organ system must be considered additive in the absence of complete information. The hazards described in this document have been evaluated from a threshold of 1.0% by weight for all hazardous ingredients and 0.1% for all carcinogenic ingredients. See Section 2 for human health hazards and symptoms of exposure.

12. ECOLOGICAL INFORMATION

This product has not been tested but is not expected to harm ecosystems through its applied use. The material is not biodegradable.

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13. WASTE DISPOSAL CONSIDERATIONS

Waste fiber cement boards, cut-offs, and dust may be disposed of in a non-hazardous waste landfill in compliance with federal, state, and local requirements.

RCRA, Subpart C, 40 CFR 261 does not classify fiber cement sheets or boards as a hazardous waste.

14. TRANSPORTATION INFORMATION

For domestic transportation purposes, this product is not regulated as a hazardous material by the U.S. Department of Transportation under Title 49 of the Code of Federal Regulations.

15. REGULATORY INFORMATION

(PART A)

US Chemical Inventory Status:

Is the product subject to any of the following?

SARA 302 – No

SARA 311 – No

SARA 312 – No

SARA 313 – No

TSCA – All components are on the TSCA Inventory

CERCLA 261.33 – No

CERCLA 8(d) – No

California Proposition 65 – This product contains a chemical known to the state of California to cause cancer.

(PART B)

Canadian Chemical Inventory Status:

French version of this MSDS is available.

Workplace Hazardous Materials Information System (WHMIS):

Fiber cement is a Class D2A material – due to the potential chronic and acute effects of crystalline silica.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations, and the MSDS contains all the information required by the Controlled Products Regulations.

16. ADDITIONAL COMMENTS

Other information

WARNING: This product contains crystalline silica. Inhalation of crystalline silica can cause silicosis, a potentially disabling lung disease, which can elevate the risk of other diseases.

When drilling, cutting, sawing, or sanding the product, use best work practices to reduce airborne dust concentrations. Work outdoors where feasible or use mechanical ventilation when possible. Use wet saws or diamond-tipped circular saws with dust collection for cutting. Use pneumatic or electric hand shears for fine cutting or shaping. Use carbide score and snap knives. Do not use compressed air for cleaning dust. When operating power tools to cut, saw, drill, or sand this product, wear safety glasses and a NIOSH-approved disposable dust mask or respirator equipped with N, P, or R cartridge and follow the manufacturer's instructions for use and care of the respirator. For further information, consult the MSDS or your employer.

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16. ADDITIONAL COMMENTS (Continued)

Reasonable care has been taken in the preparation of this information, but CertainTeed makes no warranty of merchantability or any other warranty, expressed or implied, with respect to this information. CertainTeed makes no representations and assumes no liability for any direct, incidental or consequential damages resulting from its use.

Acronyms/definitions used in this MSDS:

- ACGIH American Conference of Governmental Industrial Hygienists;
- ANSI American National Standards Institute;
- CAS No: Chemical Abstracts Services Number;
- CERCLA Comprehensive Environmental Response, Compensation and Liability Act;
- CFR Code of Federal Regulations;
- EPA Environmental Protection Agency;
- HMIS Hazardous Material Identification System;
- IARC International Agency for Research on Cancer;
- 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 (8 hour time weighted average);
- PNOC Particulates Not Otherwise Classified;
- REL Recommended Exposure Limit;
- RCRA Resource Conservation and Recovery Act;
- SARA Superfund Amendments and Reauthorization Act;
- TDG Transportation of Dangerous Goods (Canada);
- Title III Emergency Planning and Community Right to Know Act;
Section 302- Extremely Hazardous Substances;
Section 313- Toxic Chemicals;
- TLV Threshold Limit Value (8 hour time weighted average);
- TWA Time Weighted Average;
- TSCA Toxic Substance Control Act
- UFL Upper Flammable Limit.

MSDS History

MSDS Revision Summary:

| <u>Date</u> | <u>MSDS No.</u> | <u>Comments</u> |
|-------------|-----------------|---|
| 6/14/2003 | CT 10074-2 | Adopted ANSI format, inserted WHMIS information, updated ACGIH TLV, IARC and NTP information and created French version for Canada. |
| 2/24/1998 | CT 10074-1 | Original |

This is the end of CertainTeed MSDS CT 10074-2