1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**CHEMICAL PRODUCT IDENTIFICATION**

**Product/Trade Name:**
- Flintlastic® SA Base Sheet
- Flintlastic® SA Mid Ply
- Flintlastic® SA Cap Sheet
- FlintFlash™ SA
- WinterGuard™ Sand
- WinterGuard™ Granular
- WinterGuard™ HT
- Black Diamond™ Base Sheet

**Chemical Name:** Mixture

**CAS No.:** None assigned

**Common Name:** Asphalt rolled products

**Product use:** Self-adhering rolled asphalt membranes and systems used for weatherproofing

**MANUFACTURER INFORMATION**

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

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

**EMERGENCY TELEPHONE:** CHEMTREC 800-424-9300

2. COMPOSITION/INFORMATION ON INGREDIENTS

**GENERAL PRODUCT INFORMATION**

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. Under normal conditions of use the products listed in this MSDS are not expected to pose a physical hazard or health risk to humans. These products do not contain any form of asbestos materials.

The component exposure limits and other information in this document are provided for circumstances such as heating (above 250°F), burning, cutting, sanding and/or grinding when there is a potential for exposure to these components.

**Chemical Name:** Asphalt

**CAS No.:** 8052-42-4

**Percent In Product:** 40 – 70%

**Exposure Limits:**

<table>
<thead>
<tr>
<th>Exposure</th>
<th>OSHA PEL</th>
<th>ACGIH TLV</th>
<th>NIOSH REL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inhalable Fraction</td>
<td>–</td>
<td>0.5 mg/m³</td>
<td>–</td>
</tr>
<tr>
<td>(benzene-soluble aerosol)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Dust (Ceiling)</td>
<td>–</td>
<td>–</td>
<td>5 mg/m³</td>
</tr>
</tbody>
</table>
2. **COMPOSITION/INFORMATION ON INGREDIENTS (Continued)**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No.</th>
<th>Percent In Product</th>
<th>Exposure Limits</th>
<th>OSHA PEL</th>
<th>ACGIH TLV</th>
<th>NIOSH REL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Silica (Quartz)</td>
<td>14808-60-7</td>
<td>0 – 30%</td>
<td>Respirable Fraction</td>
<td>10 mg/m³/(\text{SiO}_2) + 2</td>
<td>0.05 mg/m³</td>
<td>0.05 mg/m³</td>
</tr>
<tr>
<td>Limestone</td>
<td>1317-65-3</td>
<td>1 – 25%</td>
<td>Total Dust</td>
<td>15 mg/m³</td>
<td>–</td>
<td>10 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Respirable Fraction</td>
<td>5 mg/m³</td>
<td>–</td>
<td>5 mg/m³</td>
</tr>
<tr>
<td>Fiber glass mat and/or polyester mat</td>
<td>65997-17-3 (glass fiber mat)</td>
<td>5 – 10%</td>
<td>Fiber glass</td>
<td>1 f/cc</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>SBS Polymer</td>
<td>Mixture</td>
<td>1 – 10%</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Plastic Film</td>
<td>None Assigned</td>
<td>&lt;1 – 3%</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>WinterGuard™ Granular and Black Diamond™ Base Sheet also contain</td>
<td></td>
<td></td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Coal Slag</td>
<td>None Assigned</td>
<td>25 – 30%</td>
<td>Total Dust (PNOC)</td>
<td>15 mg/m³</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Respirable Dust (PNOC)</td>
<td>5 mg/m³</td>
<td>–</td>
<td>1.5 mg/m³</td>
</tr>
<tr>
<td>Flintlastic® SA Cap Sheet also contains</td>
<td></td>
<td></td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Mineral Granules</td>
<td>None Assigned</td>
<td>15 – 40%</td>
<td>Total Dust (PNOC)</td>
<td>15 mg/m³</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Respirable Dust (PNOC)</td>
<td>5 mg/m³</td>
<td>–</td>
<td>1.5 mg/m³</td>
</tr>
</tbody>
</table>
2. **COMPOSITION/INFORMATION ON INGREDIENTS (Continued)**

Flintlastic® SA Cap Sheet also contains

- **Chemical Name:** Zinc Borate and Aluminum Hydroxide
- **CAS No.:** 138265-88-0 and 21645-51-2
- **Percent In Product:** 3 – 7%
- **Exposure Limits:** OSHA PEL, ACGIH TLV, NIOSH REL

Flintlastic® SA Mid Ply, Flintlastic® SA Cap Sheet, FlintFlash™ SA and WinterGuard™ HT also contain

- **Chemical Name:** Hydrocarbon Polymer
- **CAS No.:** Mixture
- **Percent In Product:** 1 – 10%
- **Exposure Limits:** OSHA PEL, ACGIH TLV, NIOSH REL

3. **HAZARDS IDENTIFICATION**

**APPEARANCE AND ODOR**
Flexible black material with a surface varying from smooth to rough and with a mild petroleum odor.

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

<table>
<thead>
<tr>
<th>NFPA Rating: Health</th>
<th>Flammability</th>
<th>Reactivity</th>
<th>Degree of Hazard</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0 - Minimal (Insignificant)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HMIS Rating: Health</th>
<th>Flammability</th>
<th>Reactivity</th>
<th>Degree of Hazard</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>0</td>
<td>1 - Slight (Minor)</td>
</tr>
</tbody>
</table>

*(see section 16 for acronym definitions)*

**POTENTIAL HEALTH EFFECTS**

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

Contact with dust or fibers may cause itching or redness to the skin and eyes. Inhalation of dusts from this product may cause a scratchy throat, congestion, and slight coughing. This product contains fiber glass fibers which are bound in the final product. Under normal conditions of use there is little chance of release under normal use and most emergency situations. Cutting, sanding or grinding this material may release dust and particles of crystalline silica (quartz). Exposure to airborne particles of respirable size may cause lung damage including a risk of cancer.

**Routes of Entry:** Inhalation, eye and skin contact.

**Acute Inhalation:** Contact with dusts may cause irritation of the nose, throat, and respiratory tract.

**Chronic Inhalation:** Cutting, sanding or grinding this material may release particles of crystalline silica (quartz). Exposure to airborne particles that exceed the limits listed in section 2 may cause lung damage including a risk of cancer.

**Acute Skin Contact:** Contact with the skin may result in mechanical irritation characterized by itching or redness. Drying of skin and dermatitis may occur following prolonged exposures.

**Chronic Skin Contact:** None identified.

**Acute Eye Contact:** Contact with the eye may result in mechanical irritation characterized by itching or redness.

**Chronic Eye Contact:** None identified.
3. HAZARDS IDENTIFICATION (Continued)

**Acute Ingestion:** Ingestion of this product is unlikely. However, ingestion of product may produce gastrointestinal irritation and disturbances.

**Chronic Ingestion:** None identified.

**Carcinogenicity**

**General Product Information:** An ingredient of this product may contain a small amount of bound formaldehyde which may be released when heated above 250°F. Formaldehyde is listed as a carcinogen by OSHA, as a probable human carcinogen by IARC (Group 2A), and as an anticipated human carcinogen by NTP.

**Component Carcinogenicity:**

**Asphalt (8052-42-4)**
- ACGIH: A4 – Not Classifiable as a Human Carcinogen (as benzene-soluble aerosol).
- NIOSH: Potential occupational carcinogen.
- IARC: Group 3 – Unclassifiable as to carcinogenicity in humans. Monograph 35, 1985

**Silica (Quartz) (14808-60-7)**
- ACGIH: A2 – Suspected human carcinogen.
- NIOSH: Potential occupational carcinogen.
- NTP: Known Carcinogen (related to Silica, crystalline (respirable size)) (Select Carcinogen)
- IARC: Group 1 – Carcinogenic to humans. Monograph 68, 1997 (inhaled in the form of quartz or cristobalite from occupational sources)

**Mutagenicity:** No information available for the product.

**Teratogenicity:** No information available for the product.

**Reproductive Toxicity:** No information available for the product.

**Toxicological Synergistic Products:** None identified.

**Medical Conditions Aggravated by Exposure:** Respiratory or skin conditions that are aggravated by mechanical irritants may be at an increased risk for worsening from exposure to dust.

4. FIRST AID MEASURES

**Inhalation:** Remove to fresh air. Drink water to clear throat, and blow nose to remove dust. If symptoms persist, get medical attention.

**Skin:** For skin contact, wash with soap and water. Use a waterless hand cleaner to help remove asphalt. Do not use solvents to remove product residues from skin. If irritation develops, get medical attention.

**Eyes:** Flush eyes with large amounts of water for 5-15 minutes. If irritation develops, or persists, seek medical attention.

**Ingestion:** If the material is swallowed, get immediate medical attention or advice – do not induce vomiting.

**Fires:** Move to fresh air. Administer oxygen and get help.

5. FIRE FIGHTING MEASURES

**Flash Point:** 500-600°F (260-315°C)  
**Method Used:** Not Applicable

**Upper Flammable Limit (UFL):** Not Applicable  
**Auto Ignition:** Not Determined

**Lower Flammable Limit (LFL):** Not Applicable  
**Rate of Burning:** Not Determined

**Flammability Classification:** Not Determined

**Extinguishing Media:** Dry chemical, foam, carbon dioxide. Use water to cool fire-exposed containers and to protect personnel.
5. **FIRE FIGHTING MEASURES (Continued)**

**Special Fire-Fighting Procedures:** Wear full protective clothing, including helmet, self-contained positive pressure breathing apparatus, protective clothing and face mask.

**Hazardous Decomposition Products:** Upon decomposition this product may emit hydrogen sulfide, formaldehyde, hydrogen cyanide, carbon dioxide, carbon monoxide and other low molecular weight hydrocarbons and oxides of sulfur, nitrogen, calcium and magnesium.

**Unusual Fire and Explosion Hazards:** Burning of this material will produce thick black smoke.

6. **ACCIDENTAL RELEASE MEASURES**

**Spills:** Pick up large pieces. Vacuum dust. If sweeping is necessary, use a dust suppressant such as water. These procedures will help to minimize potential exposures. Scoop up material and put into a suitable container for disposal as a non-hazardous waste.

**Accidental or Unplanned Releases:** None necessary.

**Personal Protective Equipment:** None necessary.

7. **HANDLING AND STORAGE**

**Handling:** Avoid breathing dusts from this material. Wash thoroughly after handling. Avoid direct exposure to very high heat or flame.

**Storage:** Store indoors in a cool, dry, well-ventilated area. Do not handle or store near an open flame, heat or other sources of ignition.

8. **EXPOSURE CONTROL / PERSONAL PROTECTION**

**Work Practices and Engineering Controls:** No special ventilation systems are required under normal conditions of use.

**PERSONAL PROTECTIVE EQUIPMENT**

Protective equipment should be provided as necessary to prevent prolonged skin contact; inhalation of vapors, dusts and fumes; and to keep exposure levels below the applicable exposure limits identified in Section 2.

- **Eye:** Safety glasses with sideshields may be worn to reduce the risk of eye injury.
- **Respirators:** Respiratory protection is not normally required. Use a NIOSH approved/certified respirator when the exposure limits listed in Section 2 are exceeded. Use a particulate filter respirator for particulate concentrations exceeding the Occupational Exposure Limit.
- **Skin:** Leather or cotton gloves may be worn to prevent skin contact and irritation. Normal work clothing (long sleeved shirts and long pants) is recommended.
- **Other Protection:** None.

9. **PHYSICAL AND CHEMICAL PROPERTIES**

- **Appearance:** Black flexible mat/tape-like material
- **Physical State:** Solid
- **Vapor Pressure:** Not Applicable
- **Boiling Point:** Not Applicable
- **Solubility (H₂O):** Insoluble
- **Odor:** Mild petroleum odor
- **pH:** Not Applicable
- **Vapor Density:** Not Applicable
- **Melting Point:** Not Available
- **Specific Gravity:** Not Available
10. REACTIVITY

**Stability:** This is a stable material.

**Corrosivity:** Not Applicable

**Incompatibility:** Strong oxidizing agents, reducing agents, strong acids and alkalies.

**Reactivity:** This product may react with strong oxidizing agents, reducing agents, strong acids and alkalies.

**Reactivity with water:** None under normal conditions of use.

**Hazardous Decomposition Products:** Upon decomposition this product may emit hydrogen sulfide, formaldehyde, hydrogen cyanide, carbon dioxide, carbon monoxide and other low molecular weight hydrocarbons and oxides of sulfur, nitrogen, calcium and magnesium.

**Explosion:** None expected.

**Hazardous Polymerization:** Will not occur.

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.

**General Product Information**

**Acute Effects:** Contact with dust or fibers may cause itching or redness to the skin and eyes. Inhalation of dusts from this product may cause a scratchy throat, congestion, and slight coughing.

**Chronic Effects:** Chronic health effects from this product are unlikely when used as intended.

12. ECOLOGICAL INFORMATION

**General Product Information**

This product has not been tested. Based on information related to all raw materials in the finished product it is not expected to harm ecosystems through its applied use.

**Environmental Fate**

No information available.

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 Waste Numbers are applicable for this product’s components.

**Disposal Instructions**

Dispose of waste material according to local, state, federal, and provincial environmental regulations.
14. TRANSPORTATION INFORMATION

US DOT Information
Shipping Name: Not regulated for transportation.

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

15. REGULATORY INFORMATION

US FEDERAL REGULATIONS

Clean Air Act
This product is not manufactured with, nor does it contain, any Class I ozone-depleting chemicals as defined by the EPA in Title VI of Clean Air Act Amendments of 1990 (40 CFR Part 82-Production Of Stratospheric Ozone).
This product is not subject to Section 112(r) of the Clean Air Act.

CERCLA
This material contains one or more of the following chemicals required to be identified under CERCLA (40 CFR 302.4).

Zinc borate  (1332-07-6)
CERCLA: 1000 lb final RQ; 454 kg final RQ

SARA Title III Regulations:
None of this product’s components are listed under SARA Section 302 (40 CFR 355 Appendix A), and/or SARA Section 313 (40 CFR 372.65).
Acute Health: Yes  Chronic Health: Yes  Fire: No  Pressure: No  Reactive: No

STATE REGULATIONS
Component Analysis - State Regulations
The following components appear on one or more of the following state hazardous substances lists:

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS #</th>
<th>CA</th>
<th>MA</th>
<th>MN</th>
<th>NJ</th>
<th>PA</th>
<th>RI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asphalt</td>
<td>8052-42-4</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Quartz</td>
<td>14808-60-7</td>
<td>–</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>–</td>
</tr>
<tr>
<td>Fiber glass mat, which is made from either: Continuous filament fiber glass (encapsulated) or Fibrous glass</td>
<td>65997-17-3</td>
<td>–</td>
<td>–</td>
<td>✓</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Zinc borate</td>
<td>1332-07-6</td>
<td>✓</td>
<td>✓</td>
<td>–</td>
<td>✓</td>
<td>✓</td>
<td>–</td>
</tr>
<tr>
<td>Limestone</td>
<td>1317-65-3</td>
<td>–</td>
<td>✓</td>
<td>✓</td>
<td>–</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

California Safe Drinking Water and Toxic Enforcement Act (Proposition 65)
The following statement is 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
In Canada, these products are considered manufactured articles under the Workplace Hazardous Materials Information System (WHMIS) and are exempt.
15. REGULATORY INFORMATION (Continued)

ADDITIONAL REGULATORY INFORMATION

Component Analysis - Inventory

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS #</th>
<th>TSCA</th>
<th>DSL</th>
<th>EINECS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asphalt</td>
<td>8052-42-4</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>Quartz</td>
<td>14808-60-7</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>Fiber glass mat, which is made from either: Continuous filament fiber glass (encapsulated) or Fibrous glass</td>
<td>65997-17-3</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>Zinc borate</td>
<td>1332-07-6</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>Aluminum hydroxide</td>
<td>21645-51-2</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>Limestone</td>
<td>1317-65-3</td>
<td>✔️</td>
<td>–</td>
<td>✔️</td>
</tr>
</tbody>
</table>

16. ADDITIONAL COMMENTS

Other Information
Reasonable care has been taken in the preparation of this information, but the manufacturer makes no warranty of merchantability or any other warranty, expressed or implied, with respect to this information. The manufacturer 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;
- CAS No: Chemical Abstracts Services Number;
- CERCLA: Comprehensive Environmental Response, Compensation and Liability Act;
- CFR: Code of Federal Regulations;
- DSL: Canadian Domestic Substance List;
- EINECS: European Inventory of New and Existing Chemical Substances;
- EPA: Environmental Protection Agency;
- g/cm³: Grams per cubic centimeter;
- HMIS: Hazardous Material Identification System;
- IARC: International Agency for Research on Cancer;
- 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 (OSHA);
- PNOC: Particulates Not Otherwise Classified;
- REL: Recommended Exposure Limit (NIOSH);
- SARA: Superfund Amendments and Reauthorization Act;
- RCRA: Resource Conservation and Recovery Act;
- TDG: Transportation of Dangerous Goods (Canada);
- Title III: Emergency Planning and Community Right to Know Act;
- TLV: Threshold Limit Value (ACGIH);
- TSCA: Toxics Substance Control Act;
- TWA: Time Weighted Average;
- UFL: Upper Flammable Limit;
- WHMIS: Workplace Hazardous Materials Information System;

MSDS History — MSDS Revision Summary:

<table>
<thead>
<tr>
<th>Date</th>
<th>MSDS No.</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>12/9/2003</td>
<td>CT 10060-1</td>
<td>New MSDS</td>
</tr>
</tbody>
</table>

This is the end of CertainTeed MSDS # CT 10060-1