1 Identification

- **Product identifier**
- **Trade name:** Shingle Products / Hip & Ridge / Starter Shingles
- **Other product identifiers:**
  - 8" Mountain Ridge®
  - Arcadia Shake®
  - CT™ 20
  - Firehalt
  - Firescreen®
  - High Performance Starter
  - Landmark®
  - Landmark® Premium
  - Landmark® PRO
  - Landmark Solaris®
  - Landmark® TL
  - Presidential Shake®
  - Presidential Shake® TL
  - Presidential Solaris®
  - Presidential Starter®
  - Presidential Starter® IR
  - Shadow Ridge®
  - Swiftstart®
  - Universal Starter
- **Recommended use and restriction on use**
- **Recommended use:** Asphalt Roofing Shingles
- **Restrictions on use:** See Sections 8 and 10 for further information.

- **Details of the supplier of the Safety Data Sheet**
- **Manufacturer/Supplier:**
  - CertainTeed Corporation
  - 20 Moores Road
  - Malvern, PA 19355
  - 610-893-6000
- **Emergency telephone number:**
  - CHEMTREC
  - 1-800-424-9300 (US/Canada)
  - +01 703-527-3887 (International)

2 Hazard(s) identification

- **Classification of the substance or mixture**
  - The product is not classified as hazardous according to the Globally Harmonized System (GHS).

- **Label elements**
  - **GHS label elements** Not regulated.
  - **Hazard pictograms:** Not regulated.
  - **Signal word:** Not regulated.
  - **Hazard statements:** Not regulated.
  - **Precautionary statements:** Not regulated.

- **Other hazards**
  - There are no other hazards not otherwise classified that have been identified.
Safety Data Sheet
Acc. to OSHA HCS (29 CFR 1910.1200)

Printing date: February 27, 2018
Revision: February 27, 2018

Trade name: Shingle Products / Hip & Ridge / Starter Shingles

0 % of the mixture consists of component(s) of unknown toxicity.

(Cont’d. of page 1)

3 Composition/information on ingredients

- Chemical characterization: Mixtures

<table>
<thead>
<tr>
<th>Components</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>8052-42-4</td>
<td>Asphalt</td>
<td>Carc. 2, H351</td>
</tr>
<tr>
<td>14807-96-6</td>
<td>Talc (Mg3H2(SiO3)4)</td>
<td>5-10%</td>
</tr>
<tr>
<td>14808-60-7</td>
<td>Quartz (SiO2)</td>
<td>Carc. 1A, H350</td>
</tr>
<tr>
<td>1332-58-7</td>
<td>Kaolin</td>
<td>1-2.5%</td>
</tr>
<tr>
<td>13463-67-7</td>
<td>titanium dioxide</td>
<td>Carc. 2, H351</td>
</tr>
<tr>
<td>1309-37-1</td>
<td>diiron trioxide / iron (III) oxide</td>
<td>0.1-1%</td>
</tr>
<tr>
<td>1332-37-2</td>
<td>iron oxide</td>
<td>0.1-1%</td>
</tr>
</tbody>
</table>

- Additional information:
  Non-classification as a carcinogen is based on non-respirable form of product.
  For the listed ingredient(s), the identity and/or exact percentage(s) are being withheld as a trade secret.
  For the wording of the listed Hazard Statements, refer to section 16.

4 First-aid measures

- Description of first aid measures
  - After inhalation:
    Respiration of particulates is unlikely during normal usage.
    Supply fresh air; consult doctor in case of complaints.
  - After skin contact:
    Brush off loose particles from skin.
    Wash with soap and water.
    If skin irritation is experienced, consult a doctor.
  - After eye contact:
    Remove contact lenses if worn, if possible.
    Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
  - After swallowing:
    Rinse out mouth and then drink plenty of water.
    Do not induce vomiting; immediately call for medical help.
  - Most important symptoms and effects, both acute and delayed:
    Slight irritant effect on eyes.
    Nausea in case of ingestion.
    Gastric or intestinal disorders when ingested.
  - Indication of any immediate medical attention and special treatment needed:
    No relevant information available.

5 Fire-fighting measures

- Extinguishing media
- Suitable extinguishing agents:

(Cont’d. on page 3)
Trade name: Shingle Products / Hip & Ridge / Starter Shingles

The product is not flammable.
Use fire fighting measures that suit the environment.
- For safety reasons unsuitable extinguishing agents: None.
- Special hazards arising from the substance or mixture
  Formation of toxic gases is possible during heating or in case of fire.
- Advice for firefighters
  - Protective equipment:
    Wear self-contained respiratory protective device.
    Wear fully protective suit.

6 Accidental release measures

- Personal precautions, protective equipment and emergency procedures
  Ensure adequate ventilation.
  Use personal protective equipment as required.
  Avoid formation of dust.
  Do not breathe dust.
- Environmental precautions
  Avoid release to the environment.
- Methods and material for containment and cleaning up
  Pick up mechanically.
  Send for recovery or disposal in suitable receptacles.
- Reference to other sections
  See Section 7 for information on safe handling.
  See Section 8 for information on personal protection equipment.
  See Section 13 for disposal information.

7 Handling and storage

- Handling
  - Precautions for safe handling:
    Use only in well ventilated areas.
    Prevent formation of dust.
    Any deposit of dust which cannot be avoided must be regularly removed.
  - Information about protection against explosions and fires:
    Keep respiratory protective device available.
- Conditions for safe storage, including any incompatibilities
  - Requirements to be met by storerooms and receptacles:
    Avoid storage near extreme heat, ignition sources or open flame.
  - Information about storage in one common storage facility: Store away from foodstuffs.
  - Specific end use(s) No relevant information available.

8 Exposure controls/personal protection

- Control parameters

  Components with limit values that require monitoring at the workplace:
### Safety Data Sheet

**Acc. to OSHA HCS (29 CFR 1910.1200)**

**Printing date:** February 27, 2018  
**Revision:** February 27, 2018

**Trade name:** Shingle Products / Hip & Ridge / Starter Shingles

---

### 8052-42-4 Asphalt

| REL (USA) | Ceiling limit value: 5* mg/m³  
|-----------|-------------------------------  
| *15-min; See Pocket Guide App. A |  
| TLV (USA) | Long-term value: 0.5* mg/m³  
| *inhal. fraction; as benzene-soluble aerosol; BElp |  
| EL (Canada) | Long-term value: 0.5 mg/m³  
| *inhalable, IARC 2B |  
| EV (Canada) | Long-term value: 0.5 mg/m³  
| *fume, as benzene-soluble aerosol, inhalable |  
| LMPE (Mexico) | Long-term value: 0.5* mg/m³  
| A4, *fracción inhalable |  

---

### 14807-96-6 Talc (Mg3H2(SiO3)4)

| PEL (USA) | Long-term value: 20 mppcf ppm  
|-----------|-------------------------------  
| *containing <1% Quartz |  
| REL (USA) | Long-term value: 2* mg/m³  
| *respirable dust; and <1% Quartz |  
| TLV (USA) | Long-term value: 2* mg/m³  
| *as respirable fraction; E |  
| EL (Canada) | Long-term value: 2 * 0.1 fl/cc mg/m³  
| *if contains asbestos: ACGIH A1, IARC 1 |  
| EV (Canada) | Long-term value: 2* mg/m³, 2 fl/cc ppm  
| *respirable |  
| LMPE (Mexico) | Long-term value: 2* mg/m³  
| A4, *fracción respirable |  

---

### 14808-60-7 Quartz (SiO2)

| PEL (USA) | see Quartz listing |  
| REL (USA) | Long-term value: 0.05* mg/m³  
| *respirable dust; See Pocket Guide App. A |  
| TLV (USA) | Long-term value: 0.025* mg/m³  
| *as respirable fraction |  
| EL (Canada) | Long-term value: 0.025 mg/m³  
| ACGIH A2; IARC 1 |  
| EV (Canada) | Long-term value: 0.10* mg/m³  
| *respirable fraction |  
| LMPE (Mexico) | Long-term value: 0.025* mg/m³  
| A2, *fracción respirable |  

---

### 13463-67-7 titanium dioxide

| PEL (USA) | Long-term value: 15* mg/m³  
| *total dust |  
| REL (USA) | See Pocket Guide App. A |  
| TLV (USA) | Long-term value: 10 mg/m³  
| withdrawn from NIC |  
| EL (Canada) | Long-term value: 10* 3** mg/m³  
| *total dust;**respirable fraction; IARC 2B |  
| EV (Canada) | Long-term value: 10 mg/m³ |  

---

(Cont’d. of page 3)

(Cont’d. on page 5)
## Trade name: Shingle Products / Hip & Ridge / Starter Shingles

(Cont'd. of page 4)

<table>
<thead>
<tr>
<th>Substance</th>
<th>Total Dust</th>
<th>Long-term Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>LMPE (Mexico)</td>
<td>total dust</td>
<td>Long-term value: 10 mg/m³</td>
</tr>
<tr>
<td>A4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1332-58-7 Kaolin</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PEL (USA)</td>
<td>Long-term value: 15 * 5** mg/m³ <strong>total dust</strong> *respirable fraction</td>
<td></td>
</tr>
<tr>
<td>REL (USA)</td>
<td>Long-term value: 10 * 5** mg/m³ <strong>total dust</strong> *respirable fraction</td>
<td></td>
</tr>
<tr>
<td>TLV (USA)</td>
<td>Long-term value: 2* mg/m³ E; as respirable fraction</td>
<td></td>
</tr>
<tr>
<td>EL (Canada)</td>
<td>Long-term value: 2 mg/m³</td>
<td></td>
</tr>
<tr>
<td>EV (Canada)</td>
<td>Long-term value: 2(D) mg/m³ respirable</td>
<td></td>
</tr>
<tr>
<td>LMPE (Mexico)</td>
<td>Long-term value: 2* mg/m³ A4, *fracción respirable</td>
<td></td>
</tr>
</tbody>
</table>

### 1309-37-1 diiron trioxide / iron (III) oxide

<table>
<thead>
<tr>
<th>Substance</th>
<th>Long-term Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>PEL (USA)</td>
<td>Long-term value: 10* 15** 5*** mg/m³ *Fume; Rouge: **Total dust, ***respirable</td>
</tr>
<tr>
<td>REL (USA)</td>
<td>Long-term value: 5 mg/m³ Dust &amp; fume, as Fe</td>
</tr>
<tr>
<td>TLV (USA)</td>
<td>Long-term value: 5** mg/m³ *as respirable fraction</td>
</tr>
<tr>
<td>EL (Canada)</td>
<td>Short-term value: 10** mg/m³ Long-term value: 5* 10*** 3**** mg/m³ *dust &amp; fume; Rouge: *<strong>total dust</strong>**resp.</td>
</tr>
<tr>
<td>EV (Canada)</td>
<td>Long-term value: 5* 10** mg/m³ *respirable, including Rouge;**total dust</td>
</tr>
<tr>
<td>LMPE (Mexico)</td>
<td>Long-term value: 5* mg/m³ A4, *fracción respirable</td>
</tr>
</tbody>
</table>

### 1332-37-2 Iron oxide

<table>
<thead>
<tr>
<th>Substance</th>
<th>Long-term Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>REL (USA)</td>
<td>Long-term value: 1 mg/m³ as Fe</td>
</tr>
<tr>
<td>TLV (USA)</td>
<td>Long-term value: 1 mg/m³ as Fe</td>
</tr>
<tr>
<td>LMPE (Mexico)</td>
<td>Long-term value: 1 mg/m³ como Fe</td>
</tr>
</tbody>
</table>

### Ingredients with biological limit values:

#### 8052-42-4 Asphalt

<table>
<thead>
<tr>
<th>Substance</th>
<th>Biological Limit Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>BEI (USA)</td>
<td>Medium: urine Time: end of shift at end of workweek Parameter: 1-Hydroxypyrene with hydrolysis (nonquantitative)</td>
</tr>
</tbody>
</table>

### Exposure controls

- General protective and hygienic measures:
  - Keep away from foodstuffs, beverages and feed.

(Cont'd. on page 6)
Trade name: Shingle Products / Hip & Ridge / Starter Shingles

Immediately remove all soiled and contaminated clothing.
Do not breathe dust.
- **Engineering controls:** No relevant information available.
- **Breathing equipment:**
  Not required under normal conditions of use.
  Use respiratory protection when grinding or cutting material.
  For large spills, respiratory protection may be advisable.
  Particulate mask should filter at least 99% of airborne particles.
- **Protection of hands:**
  Wear gloves for the protection against mechanical hazards according to OSHA and NIOSH rules.
- **Eye protection:** Follow OSHA or EU guidelines concerning the use of protective eyewear.
- **Body protection:** Wear protective clothing to protect against mechanical hazards.
- **Limitation and supervision of exposure into the environment**
  Avoid release to the environment.
- **Risk management measures** See Section 7 for additional information.

### 9 Physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Information on basic physical and chemical properties</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Appearance</strong></td>
<td></td>
</tr>
<tr>
<td>Form</td>
<td>Flexible shingles with granular surface</td>
</tr>
<tr>
<td>Color</td>
<td>Dark</td>
</tr>
<tr>
<td>Odor</td>
<td>Faint petroleum odor</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>pH-value</strong></td>
<td>Not applicable</td>
</tr>
<tr>
<td>Melting point/Melting range</td>
<td>Not determined</td>
</tr>
<tr>
<td>Boiling point/Boiling range</td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Flash point</strong></td>
<td>Not applicable</td>
</tr>
<tr>
<td><strong>Flammability (solid, gaseous)</strong></td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Auto-ignition temperature</strong></td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Decomposition temperature</strong></td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Danger of explosion</strong></td>
<td>Product does not present an explosion hazard.</td>
</tr>
<tr>
<td><strong>Explosion limits</strong></td>
<td>Not determined</td>
</tr>
<tr>
<td>Lower</td>
<td>Not determined</td>
</tr>
<tr>
<td>Upper</td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Oxidizing properties</strong></td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Vapor pressure</strong></td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Density</strong></td>
<td>Not determined</td>
</tr>
<tr>
<td>Relative density</td>
<td>Not determined</td>
</tr>
<tr>
<td>Vapor density</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Not applicable</td>
</tr>
<tr>
<td><strong>Solubility in / Miscibility with</strong></td>
<td></td>
</tr>
<tr>
<td>Water</td>
<td>Insoluble</td>
</tr>
</tbody>
</table>
Trade name: Shingle Products / Hip & Ridge / Starter Shingles

(Cont’d. of page 6)

- **Partition coefficient (n-octanol/water):** Not determined.
- **Viscosity**
  - Dynamic: Not applicable.
  - Kinematic: Not applicable.
- **Other information**
  - No relevant information available.

### 10 Stability and reactivity

- **Reactivity:** No relevant information available.
- **Chemical stability:** Stable under normal temperatures and pressures.
- **Thermal decomposition / conditions to be avoided:**
  - No decomposition if used and stored according to specifications.
- **Possibility of hazardous reactions**
  - Reacts with strong oxidizing agents.
  - Reacts with strong acids.
- **Conditions to avoid**
  - Sources of ignition, open flame, incompatible materials.
- **Incompatible materials**
  - Strong acids
  - Oxidizing agents
- **Hazardous decomposition products**
  - Carbon monoxide and carbon dioxide

### 11 Toxicological information

- **Information on toxicological effects**
  - **Acute toxicity:**
  - **LD/LC50 values that are relevant for classification:** None.
  - **Primary irritant effect:**
  - **On the skin:** Based on available data, the classification criteria are not met.
  - **On the eye:** Based on available data, the classification criteria are not met.
  - **Sensitization:** Based on available data, the classification criteria are not met.
  - **Carcinogenic categories**

<table>
<thead>
<tr>
<th>IARC (International Agency for Research on Cancer):</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>8052-42-4 Asphalt</td>
<td>2B</td>
</tr>
<tr>
<td>14808-80-7 Quartz (SiO2)</td>
<td>1</td>
</tr>
<tr>
<td>13463-67-7 titanium dioxide</td>
<td>2B</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>NTP (National Toxicology Program):</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>14808-80-7 Quartz (SiO2)</td>
<td>K</td>
</tr>
<tr>
<td>8007-18-9 C.I. Pigment Yellow 53</td>
<td>K</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OSHA-Ca (Occupational Safety &amp; Health Administration):</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>None of the ingredients are listed.</td>
<td></td>
</tr>
</tbody>
</table>
- **Probable route(s) of exposure:**
  - Ingestion.

(Cont’d. on page 8)
Trade name: Shingle Products / Hip & Ridge / Starter Shingles

Eye contact.
Skin contact.
- **Acute effects (acute toxicity, irritation and corrosivity):** From product as supplied: None.
- **Repeated dose toxicity:** Repeated or long-term inhalation of product dusts may cause pulmonary disease.
- **Germ cell mutagenicity:** Based on available data, the classification criteria are not met.
- **Carcinogenicity:** Contains known or suspect carcinogens when inhaled. Product is in non-inhalable form and is nonclassifiable as a carcinogen.
- **Reproductive toxicity:** Based on available data, the classification criteria are not met.
- **STOT-single exposure:** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure:** Based on available data, the classification criteria are not met.
- **Aspiration hazard:** Based on available data, the classification criteria are not met.

12 Ecological information

- **Toxicity**
  - **Aquatic toxicity** No relevant information available.
  - **Persistence and degradability** No relevant information available.
  - **Bioaccumulative potential:** No relevant information available.
  - **Mobility in soil:** No relevant information available.
- **Additional ecological information**
  - **General notes:** Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
  - **Other adverse effects** No relevant information available.

13 Disposal considerations

- **Waste treatment methods**
  - **Recommendation:** Smaller quantities can be disposed of with household waste.
  - *The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes.*
- **Uncleaned packagings**
  - **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

- **UN-Number**
  - DOT, ADR, IMDG, IATA: Not regulated.
- **UN proper shipping name**
  - DOT, ADR, IMDG, IATA: Not regulated.
### 15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
  - United States (USA)
  - SARA
  - **Section 302 (extremely hazardous substances):** None of the ingredients are listed.
  - **Section 355 (extremely hazardous substances):** None of the ingredients are listed.
  - **Section 313 (Specific toxic chemical listings):** None of the ingredients are listed.

- **TSCA (Toxic Substances Control Act)**
  - All ingredients are listed.

- **Proposition 65 (California)**
  - **Chemicals known to cause cancer:**
    - 8052-42-4 Asphalt
    - 14807-96-6 Talc (Mg3H2(SiO3)4)
    - 14808-60-7 Quartz (SiO2)
    - 13463-67-7 titanium dioxide
    - 8007-18-9 C.I. Pigment Yellow 53
  - **Chemicals known to cause reproductive toxicity for females:** None of the ingredients are listed.
  - **Chemicals known to cause reproductive toxicity for males:** None of the ingredients are listed.
  - **Chemicals known to cause developmental toxicity:** None of the ingredients are listed.

- **EPA (Environmental Protection Agency):**

(Cont’d. on page 10)
None of the ingredients are listed.

**IARC (International Agency for Research on Cancer):**

- 8052-42-4 Asphalt 2B
- 14808-60-7 Quartz (SiO2) 1
- 13463-67-7 titanium dioxide 2B

**NIOSH-Ca (National Institute for Occupational Safety and Health):**

- 8052-42-4 Asphalt
- 14808-60-7 Quartz (SiO2)
- 13463-67-7 titanium dioxide
- 8007-18-9 C.I. Pigment Yellow 53

**16 Other information**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Date of preparation / last revision** February 27, 2018 / -

- **Abbreviations and acronyms:**
  - ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
  - IMDG: International Maritime Code for Dangerous Goods
  - DOT: US Department of Transportation
  - IATA: International Air Transport Association
  - CAS: Chemical Abstracts Service (division of the American Chemical Society)
  - LC50: Lethal concentration, 50 percent
  - LD50: Lethal dose, 50 percent
  - NIOSH: National Institute for Occupational Safety and Health
  - OSHA: Occupational Safety & Health Administration
  - TLV: Threshold Limit Value
  - PEL: Permissible Exposure Limit
  - REL: Recommended Exposure Limit
  - BEI: Biological Exposure Limit
  - Carc. 1A: Carcinogenicity – Category 1A
  - Carc. 2: Carcinogenicity – Category 2

- **Sources**
  - Website, European Chemicals Agency (echa.europa.eu)
  - Website, US EPA Substance Registry Services (ofmpub.epa.gov/sor internet/registry/substreg/home/overview/home.do)
  - Website, Chemical Abstracts Registry, American Chemical Society (www.cas.org)
  - Safety Data Sheets, Individual Manufacturers
  - SDS Prepared by: ChemTel Inc.
  - 1305 North Florida Avenue
  - Tampa, Florida USA 33602-2902
  - Toll Free North America 1-888-255-3924 Intl. +01 813-248-0573
  - Website: www.chemtelinc.com