1 Identification

- Product identifier
  - Trade name: Flintlastic® FR Cap 30 T
  - Flintlastic® FR Cap 30 T Coolstar
  - Product code: CT 10123-2
- Recommended use and restriction on use
- Recommended use: Asphalt rolled roofing
- Restrictions on use: Contact manufacturer

- 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.

3 Composition/information on ingredients

- Chemical characterization: Mixtures

<table>
<thead>
<tr>
<th>Components</th>
<th>Chemical characterization</th>
<th>Carcinogenicity</th>
</tr>
</thead>
<tbody>
<tr>
<td>14808-60-7 Quartz</td>
<td></td>
<td>Carc. 1A, H350; STOT RE 1, H372</td>
</tr>
<tr>
<td>8052-42-4 Asphalt</td>
<td></td>
<td>Carc. 2, H351</td>
</tr>
<tr>
<td>21645-51-2 aluminium hydroxide</td>
<td></td>
<td></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:
    Unlikely route of exposure.
    Remove contact lenses if worn, if possible.
    Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
  - After swallowing:
    Unlikely route of exposure.
    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: No relevant information available.
- Indication of any immediate medical attention and special treatment needed:
  No relevant information available.

5 Fire-fighting measures

- Extinguishing media
  - Suitable extinguishing agents:
    CO₂, extinguishing powder or water spray. Fight larger fires with water spray.
  - 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.
- 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.
7 Handling and storage

Handling
- Precautions for safe handling: Use only in well ventilated areas.
- Information about protection against explosions and fires:
  Keep respiratory protective device available.

Conditions for safe storage, including any incompatibilities
- Storage
  - Requirements to be met by storerooms and receptacles:
    Storage area should be dry and well-ventilated.
  - 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:

<table>
<thead>
<tr>
<th>Component</th>
<th>Limit Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>14808-60-7 quartz</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PEL (USA)</td>
<td>0.05* mg/m³</td>
<td>Long-term value; See Pocket Guide App. A</td>
</tr>
<tr>
<td>REL (USA)</td>
<td>0.025* mg/m³</td>
<td>Long-term value; See Pocket Guide App. A</td>
</tr>
<tr>
<td>TLV (USA)</td>
<td>0.10* mg/m³</td>
<td>Long-term value; See Pocket Guide App. A</td>
</tr>
<tr>
<td>EL (Canada)</td>
<td>0.025 mg/m³</td>
<td>ACGIH A2; IARC 1</td>
</tr>
<tr>
<td>EV (Canada)</td>
<td>0.025 mg/m³</td>
<td>A2, *fracción respirable</td>
</tr>
</tbody>
</table>

8052-42-4 Asphalt

<table>
<thead>
<tr>
<th>Component</th>
<th>Limit Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>REL (USA)</td>
<td>5* mg/m³</td>
<td>Ceiling limit value; See Pocket Guide App. A</td>
</tr>
<tr>
<td>TLV (USA)</td>
<td>0.5* mg/m³</td>
<td>Long-term value; as benzene-soluble aerosol; BElp</td>
</tr>
<tr>
<td>EL (Canada)</td>
<td>0.5 mg/m³</td>
<td>Long-term value; as benzene-soluble aerosol, inhalable, IARC 2B</td>
</tr>
<tr>
<td>EV (Canada)</td>
<td>0.5 mg/m³</td>
<td>Long-term value; as benzene-soluble aerosol, inhalable</td>
</tr>
</tbody>
</table>

(Cont’d. on page 4)
Safety Data Sheet
acc. to OSHA HCS (29 CFR 1910.1200) and WHMIS 2015 regulations

Printing date: 07/11/2016
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Trade name: Flintlastic® FR Cap 30 T
Flintlastic® FR Cap 30 T Coolstar

(Cont'd. of page 3)

<table>
<thead>
<tr>
<th>LMPE (Mexico) Long-term value: 0.5* mg/m³</th>
<th>A4, IBEp;*fracción inhalable</th>
</tr>
</thead>
<tbody>
<tr>
<td>21645-51-2 aluminium hydroxide</td>
<td></td>
</tr>
<tr>
<td>REL (USA) Long-term value: 2 mg/m³</td>
<td></td>
</tr>
<tr>
<td>as Al</td>
<td></td>
</tr>
<tr>
<td>TLV (USA) Long-term value: 1* mg/m³</td>
<td></td>
</tr>
<tr>
<td>as Al;*as respirable fraction</td>
<td></td>
</tr>
<tr>
<td>EL (Canada) Long-term value: 10 mg/m³</td>
<td></td>
</tr>
</tbody>
</table>

Ingredients with biological limit values:

8052-42-4 Asphalt

BEI (USA) -

| Medium: urine |
| Time: end of shift at end of workweek |
| Parameter: 1-Hydroxyrene with hydrolysis (nonquantitative) |

Exposure controls

Personal protective equipment:

General protective and hygienic measures:
The usual precautionary measures for handling chemicals should be followed.
Keep away from foodstuffs, beverages and feed.
Wash hands before breaks and at the end of work.
Avoid close or long term contact with the skin.
Avoid contact with the eyes.

Engineering controls: No relevant information available.

Breathing equipment:
Not required under normal conditions of use.
Use respiratory protection when grinding or cutting material.

Protection of hands:

Protective gloves
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Eye protection:

Safety glasses

Body protection: Protective work clothing

Limitation and supervision of exposure into the environment
Avoid release to the environment.

Risk management measures See Section 7 for additional information.

(Cont'd. on page 5)
9 Physical and chemical properties

- Information on basic physical and chemical properties
  - Appearance:
    - Form: Solid material
    - Color: Black
    - Odor: Petroleum-like
    - Odor threshold: Not determined.
  - pH-value: Not applicable.
  - Melting point/Melting range: Not determined.
  - Boiling point/Boiling range: Not determined.
  - Flash point: Not applicable.
  - Flammability (solid, gaseous): Not determined.
  - Auto-ignition temperature: Not determined.
  - Decomposition temperature: Not determined.
  - Danger of explosion: Product does not present an explosion hazard.
  - Explosion limits
    - Lower: Not determined.
    - Upper: Not determined.
  - Oxidizing properties: Not determined.
  - Vapor pressure: Not determined.
  - Density:
    - Relative density: Not determined.
    - Vapor density: Not applicable.
    - Evaporation rate: Not applicable.
  - Solubility in / Miscibility with
    - Water: Insoluble.
  - 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.
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.

<table>
<thead>
<tr>
<th>IARC (International Agency for Research on Cancer):</th>
</tr>
</thead>
<tbody>
<tr>
<td>14808-60-7 quartz          1</td>
</tr>
<tr>
<td>8052-42-4 Asphalt         2B</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>NTP (National Toxicology Program):</th>
</tr>
</thead>
<tbody>
<tr>
<td>14808-60-7 quartz       K</td>
</tr>
</tbody>
</table>

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

- Probable route(s) of exposure: Skin contact.
- CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)
  - 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: Avoid release to the environment.
Trade name: Flintlastic® FR Cap 30 T
Flintlastic® FR Cap 30 T Coolstar

Results of PBT and vPvB assessment
- PBT: Not applicable.
- vPvB: Not applicable.
- Other adverse effects: No relevant information available.

13 Disposal considerations
- Waste treatment methods
  - Recommendation:
    Smaller quantities can be disposed of with household waste.
    Contact waste processors for recycling information.
    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.
- Transport hazard class(es)
  - DOT, ADR, IMDG, IATA
  - Class: Not regulated.
- Packing group
  - DOT, ADR, IMDG, IATA: Not regulated.
- Environmental hazards
  - Marine pollutant: No
- Special precautions for user: Not applicable.
- Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: Not applicable.
### 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)**
    - Some ingredients listed.
  - **Proposition 65 (California)**
    - **Chemicals known to cause cancer:**
      - 14808-60-7 quartz
      - 8052-42-4 Asphalt
    - **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.
  - **Carcinogenic categories**
    - **EPA (Environmental Protection Agency):**
      - None of the ingredients are listed.
    - **IARC (International Agency for Research on Cancer):**
      - References to chemical components listed below are based on unbound respirable particles and are not generally applicable to product as supplied.
      - 14808-60-7 quartz
      - 8052-42-4 Asphalt
  - **NIOSH-Ca (National Institute for Occupational Safety and Health):**
    - 14808-60-7 quartz
    - 8052-42-4 Asphalt
  - **Canadian Domestic Substances List (DSL):**
    - Some ingredients listed.
Safety Data Sheet
acc. to OSHA HCS (29 CFR 1910.1200) and WHMIS 2015 regulations

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Trade name: Flintlastic® FR Cap 30 T
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(Cont’d. of page 8)

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 07/11/2016 /

• 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
  PBT: Persistent, Bioaccumulative and Toxic
  vPvB: very Persistent and very Bioaccumulative
  NIOSH: National Institute for Occupational Safety
  OSHA: Occupational Safety & Health
  LDLo: Lowest Lethal Dose Observed
  Carc. 1A: Carcinogenicity – Category 1A
  Carc. 2: Carcinogenicity – Category 2
  STOT RE 1: Specific target organ toxicity (repeated exposure) – Category 1

• 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)
  978-0-07-176923-5.
  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