## SECTION 1: Identification

### 1.1. Identification

- **Product form**: Mixture
- **Product name**: 19 Flashing Cement
- **Product code**: X19 AF- WG-5M

### 1.2. Recommended use and restrictions on use

- **Use of the substance/mixture**: Architectural Coating

### 1.3. Supplier

**Manufacturer**
Karnak Corporation  
330 Central Avenue  
Clark, New Jersey 07066 - USA  
T +1-800-526-4236  
www.karnakcorp.com

### 1.4. Emergency telephone number

- **Emergency number**: CHEMTREC (US Transportation): (800)424-9300

## SECTION 2: Hazard(s) identification

### 2.1. Classification of the substance or mixture

<table>
<thead>
<tr>
<th>Classification (GHS US)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flam. Liq. 3</td>
<td>Flammable liquid and vapor</td>
</tr>
<tr>
<td>Carc. 1A</td>
<td>May cause cancer</td>
</tr>
<tr>
<td>Repr. 2</td>
<td>Suspected of damaging fertility or the unborn child</td>
</tr>
<tr>
<td>STOT RE 1</td>
<td>Causes damage to organs through prolonged or repeated exposure</td>
</tr>
</tbody>
</table>

### 2.2. GHS Label elements, including precautionary statements

<table>
<thead>
<tr>
<th>Hazard pictograms (GHS US)</th>
<th></th>
</tr>
</thead>
</table>

- **Signal word (GHS US)**: Danger
- **Hazard statements (GHS US)**: Flammable liquid and vapor, May cause cancer, Suspected of damaging fertility or the unborn child, Causes damage to organs through prolonged or repeated exposure
- **Precautionary statements (GHS US)**: Obtain special instructions before use, Do not handle until all safety precautions have been read and understood, Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking, Keep container tightly closed, Ground/Bond container and receiving equipment, Use explosion-proof electrical/ventilating/lighting equipment, Use only non-sparking tools, Take precautionary measures against static discharge
Do not breathe dust/fume/gas/mist/vapors/spray. Wash hands, forearms and face thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves/protective clothing/eye protection/face protection. If exposed or concerned: Get medical advice/attention. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Store in a well-ventilated place. Keep cool. Store locked up. Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

2.3. Other hazards which do not result in classification
No additional information available

2.4. Unknown acute toxicity (GHS US)
Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances
Not applicable

3.2. Mixtures

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asphalt</td>
<td>CAS-No.: 8052-42-4</td>
<td>25 - 45</td>
</tr>
<tr>
<td>Naphtha, petroleum, hydrotreated heavy</td>
<td>CAS-No.: 64742-48-9</td>
<td>&lt; 30</td>
</tr>
<tr>
<td>Stoddard solvent</td>
<td>CAS-No.: 8052-41-3</td>
<td>&lt; 30</td>
</tr>
<tr>
<td>Kaolin</td>
<td>CAS-No.: 1332-58-7</td>
<td>5 - 10</td>
</tr>
<tr>
<td>Microcrystalline cellulose</td>
<td>CAS-No.: 9004-34-6</td>
<td>5 - 10</td>
</tr>
<tr>
<td>Benzene, 1,2,4-trimethyl-</td>
<td>CAS-No.: 95-63-6</td>
<td>&lt; 2</td>
</tr>
<tr>
<td>nonane</td>
<td>CAS-No.: 111-84-2</td>
<td>&lt; 2</td>
</tr>
<tr>
<td>Quartz</td>
<td>CAS-No.: 14808-60-7</td>
<td>&lt; 1</td>
</tr>
<tr>
<td>Xylenes (o-, m-, p- isomers)</td>
<td>CAS-No.: 1330-20-7</td>
<td>&lt; 1</td>
</tr>
<tr>
<td>Toluene</td>
<td>CAS-No.: 108-88-3</td>
<td>&lt; 1</td>
</tr>
<tr>
<td>hexane</td>
<td>CAS-No.: 110-54-3</td>
<td>&lt; 1</td>
</tr>
<tr>
<td>Ethylbenzene</td>
<td>CAS-No.: 100-41-4</td>
<td>&lt; 1</td>
</tr>
<tr>
<td>Naphthalene</td>
<td>CAS-No.: 91-20-3</td>
<td>&lt; 1</td>
</tr>
</tbody>
</table>

*Chemical name, CAS number and/or exact concentration have been withheld as a trade secret

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures general : IF exposed or concerned: Get medical advice/attention.
First-aid measures after inhalation : If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell.
19 Flashing Cement
Safety Data Sheet

First-aid measures after skin contact:
If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
Wash clothing before re-using. Get medical attention if irritation develops and persists.

First-aid measures after eye contact:
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

First-aid measures after ingestion:
Never give anything by mouth to an unconscious person. Do not induce vomiting without medical advice. Get medical advice/attention if you feel unwell.

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects after inhalation:
May cause irritation to the respiratory tract.

Symptoms/effects after skin contact:
May cause skin irritation. Repeated exposure may cause skin dryness or cracking.

Symptoms/effects after eye contact:
May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling.

Symptoms/effects after ingestion:
May be harmful if swallowed. May cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Chronic symptoms:
May cause cancer. Suspected of damaging fertility or the unborn child. Causes damage to organs through prolonged or repeated exposure.

4.3. Immediate medical attention and special treatment, if necessary

Symptoms may be delayed. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media:
Use extinguishing media appropriate for surrounding fire.

Unsuitable extinguishing media:
Do not use water jet.

5.2. Specific hazards arising from the chemical

Fire hazard:
Flammable liquid and vapor. Products of combustion may include, and are not limited to: oxides of carbon. Hydrocarbons.

Explosion hazard:
May form flammable/explosive vapor-air mixture.

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions:
Move containers away from the fire area if this can be done without risk. Cool closed containers exposed to fire with water spray.

Protection during firefighting:
Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA).

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures:
Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel. Use special care to avoid static electric charges. Remove all sources of ignition. Use only non-sparking tools.

6.1.1. For non-emergency personnel
No additional information available

6.1.2. For emergency responders
No additional information available

6.2. Environmental precautions

Prevent entry to sewers and public waters.
6.3. Methods and material for containment and cleaning up

For containment:
Stop leak if safe to do so. Absorb and/or contain spill with inert material (sand, vermiculite or other appropriate material), then place in suitable container. Do not flush into surface water or sewer system. Wear recommended personal protective equipment.

Methods for cleaning up:
Sweep or shovel spills into appropriate container for disposal. Provide ventilation.

6.4. Reference to other sections

For further information refer to section 8: “Exposure controls/personal protection”.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed:
Handle empty containers with care because residual vapors are flammable.

Precautions for safe handling:
Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid contact with eyes, skin and clothing. Do not breathe dust, fume, gas, mist, spray, vapors. Do not swallow. When using do not eat, drink or smoke. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Take precautionary measures against static discharge. Handle and open container with care. Use only non-sparking tools. Use explosion-proof equipment. Benzene may be present in trace amounts. Benzene is subject to the standard 29 CFR 1910.1028 which may contain specific requirements for handling including protective equipment, regulated areas, monitoring and medical surveillance. The employer should review the standard and assure compliance with applicable requirements.

Hygiene measures:
Take off immediately all contaminated clothing and wash it before reuse. Wash hands, forearms and face thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures:
Proper grounding procedures to avoid static electricity should be followed.

Storage conditions:
Keep out of the reach of children. Keep container tightly closed. Store in a dry, cool and well-ventilated place. Store locked up.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

19 Flashing Cement
No additional information available

Asphalt (8052-42-4)

USA - ACGIH - Occupational Exposure Limits

| ACGIH OEL TWA | 0.5 mg/m³ (fume, inhalable particulate matter) |
| ACGIH chemical category | Not Classifiable as a Human Carcinogen fume, coal tar-free |
### Asphalt (8052-42-4)

#### USA - ACGIH - Biological Exposure Indices

- **BEI (BLV)**: 2.5 μg/l Parameter: 1-Hydroxypyrene with hydrolysis - Medium: urine - Sampling time: end of shift at end of workweek (background)
  
  Parameter: 3-Hydroxybenzo(a)pyrene with hydrolysis - Medium: urine - Sampling time: end of shift at end of workweek (nonquantitative)

### Naphtha, petroleum, hydrotreated heavy (64742-48-9)

No additional information available

### Xylenes (o-, m-, p- isomers) (1330-20-7)

#### USA - ACGIH - Occupational Exposure Limits

- **ACGIH OEL TWA [ppm]**: 100 ppm
- **ACGIH OEL STEL [ppm]**: 150 ppm
- **ACGIH chemical category**: Not Classifiable as a Human Carcinogen

#### USA - ACGIH - Biological Exposure Indices

- **BEI (BLV)**: 1.5 g/g Kreatinin Parameter: Methylhippuric acids - Medium: urine - Sampling time: end of shift

#### USA - OSHA - Occupational Exposure Limits

- **Local name**: Xylenes (o-, m-, p-isomers)
- **OSHA PEL (TWA) [1]**: 435 mg/m³
- **OSHA PEL (TWA) [2]**: 100 ppm
- **Regulatory reference (US-OSHA)**: OSHA Annotated Table Z-1

### Toluene (108-88-3)

#### USA - ACGIH - Occupational Exposure Limits

- **Local name**: Toluene
- **ACGIH OEL TWA [ppm]**: 20 ppm
- **Remark (ACGIH)**: TLV® Basis: Visual impair; female repro; pregnancy loss. Notations: A4 (Not classifiable as a Human Carcinogen); BEI
- **ACGIH chemical category**: Not Classifiable as a Human Carcinogen
- **Regulatory reference**: ACGIH 2020

#### USA - ACGIH - Biological Exposure Indices

- **BEI (BLV)**: 0.02 mg/l Parameter: Toluene - Medium: blood - Sampling time: prior to last shift of workweek
  
  0.03 mg/l Parameter: Toluene - Medium: urine - Sampling time: end of shift
  
  0.3 mg/g Kreatinin Parameter: o-Cresol with hydrolysis - Medium: urine - Sampling time: end of shift (background)

#### USA - OSHA - Occupational Exposure Limits

- **Local name**: Toluene
- **OSHA PEL (TWA) [2]**: 200 ppm
- **OSHA PEL C [ppm]**: 300 ppm
- **Acceptable maximum peak above the acceptable ceiling concentration for an 8-hr shift**: 500 ppm Peak (10 minutes)
- **Regulatory reference (US-OSHA)**: OSHA Annotated Table Z-2
Ethylbenzene (100-41-4)

<table>
<thead>
<tr>
<th>USA - ACGIH - Occupational Exposure Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACGIH OEL TWA [ppm]</td>
</tr>
<tr>
<td>ACGIH chemical category</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>USA - ACGIH - Biological Exposure Indices</th>
</tr>
</thead>
<tbody>
<tr>
<td>BEI (BLV)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>USA - OSHA - Occupational Exposure Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local name</td>
</tr>
<tr>
<td>OSHA PEL (TWA) [1]</td>
</tr>
<tr>
<td>OSHA PEL (TWA) [2]</td>
</tr>
<tr>
<td>Regulatory reference (US-OSHA)</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

hexane (110-54-3)

<table>
<thead>
<tr>
<th>USA - ACGIH - Occupational Exposure Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACGIH OEL TWA [ppm]</td>
</tr>
<tr>
<td>ACGIH chemical category</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>USA - ACGIH - Biological Exposure Indices</th>
</tr>
</thead>
<tbody>
<tr>
<td>BEI (BLV)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>USA - OSHA - Occupational Exposure Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>OSHA PEL (TWA) [1]</td>
</tr>
<tr>
<td>OSHA PEL (TWA) [2]</td>
</tr>
</tbody>
</table>

Stoddard solvent (8052-41-3)

<table>
<thead>
<tr>
<th>USA - ACGIH - Occupational Exposure Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local name</td>
</tr>
<tr>
<td>ACGIH OEL TWA [ppm]</td>
</tr>
<tr>
<td>Remark (ACGIH)</td>
</tr>
<tr>
<td>Regulatory reference</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>USA - OSHA - Occupational Exposure Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local name</td>
</tr>
<tr>
<td>OSHA PEL (TWA) [1]</td>
</tr>
<tr>
<td>OSHA PEL (TWA) [2]</td>
</tr>
<tr>
<td>Regulatory reference (US-OSHA)</td>
</tr>
</tbody>
</table>

Naphthalene (91-20-3)

<table>
<thead>
<tr>
<th>USA - ACGIH - Occupational Exposure Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACGIH OEL TWA [ppm]</td>
</tr>
<tr>
<td>ACGIH chemical category</td>
</tr>
</tbody>
</table>
### Naphthalene (91-20-3)

**USA - ACGIH - Biological Exposure Indices**

<table>
<thead>
<tr>
<th>BEI (BLV)</th>
<th>Parameter: 1-Naphthol with hydrolysis plus 2-Naphthol with hydrolysis - Sampling time: end of shift (nonquantitative, nonspecific)</th>
</tr>
</thead>
</table>

**USA - OSHA - Occupational Exposure Limits**

<table>
<thead>
<tr>
<th>OSHA PEL (TWA) [1]</th>
<th>50 mg/m³</th>
</tr>
</thead>
<tbody>
<tr>
<td>OSHA PEL (TWA) [2]</td>
<td>10 ppm</td>
</tr>
</tbody>
</table>

### nonane (111-84-2)

**USA - ACGIH - Occupational Exposure Limits**

<table>
<thead>
<tr>
<th>ACGIH OEL TWA [ppm]</th>
<th>200 ppm</th>
</tr>
</thead>
</table>

### Benzene, 1,2,4-trimethyl- (95-63-6)

No additional information available

### Microcrystalline cellulose (9004-34-6)

**USA - ACGIH - Occupational Exposure Limits**

<table>
<thead>
<tr>
<th>ACGIH OEL TWA</th>
<th>10 mg/m³</th>
</tr>
</thead>
</table>

**USA - OSHA - Occupational Exposure Limits**

<table>
<thead>
<tr>
<th>OSHA PEL (TWA) [1]</th>
<th>15 mg/m³ (total dust)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>5 mg/m³ (respirable fraction)</td>
</tr>
</tbody>
</table>

### Kaolin (1332-58-7)

**USA - ACGIH - Occupational Exposure Limits**

<table>
<thead>
<tr>
<th>Local name</th>
<th>Kaolin</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACGIH OEL TWA</td>
<td>2 mg/m³ (particulate matter containing no asbestos and &lt;1% crystalline silica, respirable particulate matter)</td>
</tr>
</tbody>
</table>

**Remark (ACGIH)**

TLV® Basis: Pneumoconiosis. Notations: A4 (Not classifiable as a Human Carcinogen)

**ACGIH chemical category**

Not Classifiable as a Human Carcinogen

**Regulatory reference**

ACGIH 2020
19 Flashing Cement
Safety Data Sheet

Kaolin (1332-58-7)
USA - OSHA - Occupational Exposure Limits
OSHA PEL (TWA) [1] 15 mg/m³ (total dust)
5 mg/m³ (respirable fraction)

Quartz (14808-60-7)
USA - ACGIH - Occupational Exposure Limits
ACGIH OEL TWA 0.025 mg/m³ (respirable particulate matter)
ACGIH chemical category Suspected Human Carcinogen
USA - OSHA - Occupational Exposure Limits
Local name Quartz (Total Dust) (Silica: Crystalline)
OSHA PEL (TWA) [1] 50 µg/m³ (Respirable crystalline silica)
Remark (OSHA) Table Z-3. For OSHA PEL (TWA) use formula: (30 mg/m3 / (%SiO2+2)) for mg/m3. CAS No. source: eCFR Table Z-1.
Regulatory reference (US-OSHA) OSHA Annotated Table Z-3 Mineral Dusts

8.2. Appropriate engineering controls
Appropriate engineering controls: Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, etc.) below recommended exposure limits. Provide readily accessible eye wash stations and safety showers. Use explosion-proof electrical (ventilating, lighting and material handling) equipment.

Environmental exposure controls: Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Hand protection:
Wear suitable gloves

Eye protection:
Safety glasses or goggles are recommended when using product.

Skin and body protection:
Wear suitable protective clothing. Avoid unnecessary contact with skin.

Respiratory protection:
In case of insufficient ventilation, wear suitable respiratory equipment. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Other information:
Handle in accordance with good industrial hygiene and safety procedures. Do not eat, drink or smoke when using this product.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: Liquid
Color: No data available
Odor: No data available
Odor threshold: No data available
pH: No data available
Melting point: No data available
### 9.2. Other information

No additional information available

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

No dangerous reactions known under normal conditions of use.

#### 10.2. Chemical stability

Stable under normal conditions. May form flammable/explosive vapor-air mixture.

#### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

#### 10.4. Conditions to avoid


#### 10.5. Incompatible materials


#### 10.6. Hazardous decomposition products

May include, and are not limited to: oxides of carbon. Hydrocarbons. May release flammable gases.

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

<table>
<thead>
<tr>
<th>Toxicity</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity (oral)</td>
<td>Not classified</td>
</tr>
<tr>
<td>Acute toxicity (dermal)</td>
<td>Not classified</td>
</tr>
<tr>
<td>Acute toxicity (inhalaion)</td>
<td>Not classified</td>
</tr>
</tbody>
</table>

**Asphalt (8052-42-4)**

<table>
<thead>
<tr>
<th>Test</th>
<th>LD50 Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 oral rat</td>
<td>&gt; 5000 mg/kg</td>
</tr>
<tr>
<td>LD50 dermal rabbit</td>
<td>&gt; 2000 mg/kg</td>
</tr>
<tr>
<td>Substance Description</td>
<td>Endpoint</td>
</tr>
<tr>
<td>-----------------------</td>
<td>----------</td>
</tr>
<tr>
<td><strong>Asphalt (8052-42-4)</strong></td>
<td>LC50 inhalation rat</td>
</tr>
<tr>
<td><strong>Naphtha, petroleum, hydrotreated heavy (64742-48-9)</strong></td>
<td>LD50 oral rat</td>
</tr>
<tr>
<td></td>
<td>LD50 dermal rabbit</td>
</tr>
<tr>
<td></td>
<td>LC50 inhalation rat</td>
</tr>
<tr>
<td><strong>Xylenes (o-, m-, p- isomers) (1330-20-7)</strong></td>
<td>LD50 oral rat</td>
</tr>
<tr>
<td></td>
<td>LD50 dermal rat</td>
</tr>
<tr>
<td><strong>Toluene (108-88-3)</strong></td>
<td>LD50 oral rat</td>
</tr>
<tr>
<td></td>
<td>LD50 dermal rabbit</td>
</tr>
<tr>
<td></td>
<td>LC50 inhalation rat</td>
</tr>
<tr>
<td><strong>Ethylbenzene (100-41-4)</strong></td>
<td>LD50 oral rat</td>
</tr>
<tr>
<td></td>
<td>LD50 dermal rabbit</td>
</tr>
<tr>
<td></td>
<td>LC50 inhalation rat</td>
</tr>
<tr>
<td><strong>hexane (110-54-3)</strong></td>
<td>LD50 oral rat</td>
</tr>
<tr>
<td></td>
<td>LD50 dermal rabbit</td>
</tr>
<tr>
<td></td>
<td>LC50 inhalation rat</td>
</tr>
<tr>
<td><strong>Stoddard solvent (8052-41-3)</strong></td>
<td>LD50 dermal rabbit</td>
</tr>
<tr>
<td></td>
<td>LC50 inhalation rat</td>
</tr>
<tr>
<td><strong>Naphthalene (91-20-3)</strong></td>
<td>LD50 oral rat</td>
</tr>
<tr>
<td></td>
<td>LD50 dermal rabbit</td>
</tr>
<tr>
<td></td>
<td>LC50 inhalation rat</td>
</tr>
<tr>
<td></td>
<td>LD50 dermal rabbit</td>
</tr>
<tr>
<td></td>
<td>LC50 inhalation rat</td>
</tr>
<tr>
<td></td>
<td>LC50 inhalation rat</td>
</tr>
<tr>
<td><strong>Benzene, 1,2,4-trimethyl- (95-63-6)</strong></td>
<td>LD50 oral rat</td>
</tr>
</tbody>
</table>
Benzene, 1,2,4-trimethyl- (95-63-6)
- LD50 dermal rabbit: > 3160 mg/kg
- LC50 inhalation rat: 18 g/m³ (Exposure time: 4 h)

Microcrystalline cellulose (9004-34-6)
- LD50 oral rat: > 5 g/kg
- LD50 dermal rabbit: > 2000 mg/kg
- LC50 inhalation rat: > 5800 mg/m³ (Exposure time: 4 h)

Kaolin (1332-58-7)
- LD50 oral rat: > 5000 mg/kg
- LD50 dermal rat: > 5000 mg/kg
- Skin corrosion/irritation: Not classified
- Serious eye damage/irritation: Not classified
- Respiratory or skin sensitization: Not classified
- Germ cell mutagenicity: Not classified
- Carcinogenicity: May cause cancer.

Asphalt (8052-42-4)
- IARC group: 2B - Possibly carcinogenic to humans
- In OSHA Hazard Communication Carcinogen list: Yes

Xylenes (o-, m-, p- isomers) (1330-20-7)
- IARC group: 3 - Not classifiable

Toluene (108-88-3)
- IARC group: 3 - Not classifiable

Ethylbenzene (100-41-4)
- IARC group: 2B - Possibly carcinogenic to humans
- National Toxicology Program (NTP) Status: Evidence of Carcinogenicity
- In OSHA Hazard Communication Carcinogen list: Yes

Naphthalene (91-20-3)
- IARC group: 2B - Possibly carcinogenic to humans
- National Toxicology Program (NTP) Status: Reasonably anticipated to be Human Carcinogen, Evidence of Carcinogenicity
- In OSHA Hazard Communication Carcinogen list: Yes

Quartz (14808-60-7)
- IARC group: 1 - Carcinogenic to humans
- National Toxicology Program (NTP) Status: Known Human Carcinogens
- In OSHA Hazard Communication Carcinogen list: Yes

Reproductive toxicity: Suspected of damaging fertility or the unborn child.

Naphthalene (91-20-3)
## Naphthalene (91-20-3)

<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>NOAEL (animal/female, F0/P)</td>
<td>120 mg/kg body weight Animal: rabbit, Animal sex: female, Guideline: other: OECD Guideline 414 (Prenatal Developmental Toxicity Study)</td>
</tr>
</tbody>
</table>

STOT - single exposure: Not classified

## Xylenes (o-, m-, p- isomers) (1330-20-7)

| STOT - single exposure | May cause drowsiness or dizziness. |

## Toluene (108-88-3)

| STOT - single exposure | May cause drowsiness or dizziness. |

## Hexane (110-54-3)

| STOT - single exposure | May cause drowsiness or dizziness. |

## Nonane (111-84-2)

| STOT - single exposure | May cause drowsiness or dizziness. |

## Benzene, 1,2,4-trimethyl- (95-63-6)

| STOT - single exposure | May cause respiratory irritation. |

| STOT - repeated exposure | Causes damage to organs through prolonged or repeated exposure. |
## 19 Flashing Cement
### Safety Data Sheet

### Asphalt (8052-42-4)

<table>
<thead>
<tr>
<th>Exposure Route</th>
<th>LOAEC</th>
<th>Concentration</th>
<th>Animal</th>
<th>Guideline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inhalation, rat, dust/mist/fume, 90 days</td>
<td>0.0207 mg/l air</td>
<td>Animal: rat</td>
<td>Guideline: OECD 451</td>
<td></td>
</tr>
</tbody>
</table>

### Xylenes (α-, m-, p- isomers) (1330-20-7)

<table>
<thead>
<tr>
<th>Exposure Route</th>
<th>LOAEL</th>
<th>Concentration</th>
<th>Animal</th>
<th>Animal sex</th>
<th>Guideline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral, rat, 90 days</td>
<td>150 mg/kg body weight</td>
<td>Animal: rat</td>
<td>Male</td>
<td>OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)</td>
<td></td>
</tr>
</tbody>
</table>

STOT-repeated exposure

May cause damage to organs through prolonged or repeated exposure.

### Toluene (108-88-3)

<table>
<thead>
<tr>
<th>Exposure Route</th>
<th>LOAEL</th>
<th>Concentration</th>
<th>Animal</th>
<th>Animal sex</th>
<th>Guideline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral, rat, 90 days</td>
<td>1250 mg/kg body weight</td>
<td>Animal: rat</td>
<td>Male</td>
<td>EU Method B.26 (Sub-Chronic Oral Toxicity Test: Repeated Dose 90-Day Oral Toxicity Study in Rodents)</td>
<td></td>
</tr>
</tbody>
</table>

NOAEL (oral, rat, 90 days)

625 mg/kg body weight

Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)

NOAEC (inhalation, rat, vapor, 90 days)

2.355 mg/l air

Animal: rat, Guideline: EU Method B.29 (Sub-Chronic Inhalation Toxicity: 90-Day Study)

STOT-repeated exposure

May cause damage to organs through prolonged or repeated exposure.

### Ethylbenzene (100-41-4)

<table>
<thead>
<tr>
<th>Exposure Route</th>
<th>NOAEL</th>
<th>Concentration</th>
<th>Animal</th>
<th>Animal sex</th>
<th>Guideline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral, rat, 90 days</td>
<td>75 mg/kg body weight</td>
<td>Animal: rat</td>
<td>Male</td>
<td>OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)</td>
<td></td>
</tr>
</tbody>
</table>

STOT-repeated exposure

May cause damage to organs through prolonged or repeated exposure.

### Hexane (110-54-3)

STOT-repeated exposure

Causes damage to organs through prolonged or repeated exposure.

### Stoddard solvent (8052-41-3)

STOT-repeated exposure

Causes damage to organs (central nervous system) through prolonged or repeated exposure.

### Naphthalene (91-20-3)

<table>
<thead>
<tr>
<th>Exposure Route</th>
<th>LOAEL</th>
<th>Concentration</th>
<th>Animal</th>
<th>Animal sex</th>
<th>Guideline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral, rat, 90 days</td>
<td>400 mg/kg body weight</td>
<td>Animal: rat</td>
<td>Male</td>
<td>OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)</td>
<td></td>
</tr>
</tbody>
</table>

LOAEC (inhalation, rat, vapor, 90 days)

0.011 mg/l air

Animal: rat, Guideline: EPA OPP 82-4 (90-Day Inhalation Toxicity), Guideline: OECD Guideline 413 (Subchronic Inhalation Toxicity: 90-Day Study)

NOAEL (dermal, rat/rabbit, 90 days)

1000 mg/kg body weight

Animal: rat, Guideline: OECD Guideline 411 (Subchronic Dermal Toxicity: 90-Day Study)

STOT-repeated exposure

May cause damage to organs through prolonged or repeated exposure.

### Nonane (111-84-2)

<table>
<thead>
<tr>
<th>Exposure Route</th>
<th>NOAEL</th>
<th>Concentration</th>
<th>Animal</th>
<th>Animal sex</th>
<th>Guideline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral, rat, 90 days</td>
<td>100 mg/kg body weight</td>
<td>Animal: rat, Male</td>
<td></td>
<td>OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)</td>
<td></td>
</tr>
</tbody>
</table>

NOAEC (inhalation, rat, vapor, 90 days)

24.3 mg/l air

Animal: rat, Guideline: OECD Guideline 413 (Subchronic Inhalation Toxicity: 90-Day Study)

NOAEL (subchronic, oral, animal/male, 90 days)

100 mg/kg body weight

Animal: mouse, Male, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)

### Benzene, 1,2,4-trimethyl- (95-63-6)

<table>
<thead>
<tr>
<th>Exposure Route</th>
<th>NOAEL</th>
<th>Concentration</th>
<th>Animal</th>
<th>Animal sex</th>
<th>Guideline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral, rat, 90 days</td>
<td>600 mg/kg body weight</td>
<td>Animal: rat</td>
<td>Male</td>
<td>OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)</td>
<td></td>
</tr>
</tbody>
</table>

NOAEC (inhalation, rat, vapor, 90 days)

1.8 mg/l air

Animal: rat, Guideline: OECD Guideline 452 (Chronic Toxicity Studies)
19 Flashing Cement
Safety Data Sheet

Quartz (14808-60-7)
STOT - repeated exposure: Causes damage to organs through prolonged or repeated exposure.

Aspiration hazard: Not classified
Viscosity, kinematic: > 20.5 mm²/s
Symptoms/effects after inhalation: May cause irritation to the respiratory tract.
Symptoms/effects after skin contact: May cause skin irritation. Repeated exposure may cause skin dryness or cracking.
Symptoms/effects after eye contact: May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling.
Symptoms/effects after ingestion: May be harmful if swallowed. May cause gastrointestinal irritation, nausea, vomiting and diarrhea
Chronic symptoms: May cause cancer. Suspected of damaging fertility or the unborn child. Causes damage to organs through prolonged or repeated exposure.
Other information: Likely routes of exposure: ingestion, inhalation, skin and eye.

SECTION 12: Ecological information

12.1. Toxicity
Ecology - general: May cause long-term adverse effects in the aquatic environment.

Naphtha, petroleum, hydrotreated heavy (64742-48-9)
LC50 - Fish [1] 2200 mg/l (Exposure time: 96 h - Species: Pimephales promelas)

Xylenes (o-, m-, p- isomers) (1330-20-7)
LC50 - Fish [1] 2.6 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri)
EC50 - Crustacea [1] > 3.4 mg/l Test organisms (species): Ceriodaphnia dubia
LC50 - Fish [2] 2.661 – 4.093 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])
EC50 - Crustacea [2] 0.6 mg/l (Exposure time: 48 h - Species: Gammarus lacustris)
LOEC (chronic) 3.16 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC chronic fish > 1.3 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri) Duration: '56 d'

Toluene (108-88-3)
LC50 - Fish [1] 5.5 mg/l Test organisms (species): Oncorhynchus kisutch
EC50 - Crustacea [1] 5.46 – 9.83 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])
LC50 - Fish [2] 12.6 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])
EC50 - Crustacea [2] 11.5 mg/l (Exposure time: 48 h - Species: Daphnia magna)
LOEC (chronic) 2.76 mg/l Test organisms (species): Ceriodaphnia dubia Duration: '7 d'
NOEC (chronic) 0.74 mg/l Test organisms (species): Ceriodaphnia dubia Duration: '7 d'
NOEC chronic fish 1.39 mg/l Test organisms (species): Oncorhynchus kisutch Duration: '40 d'
NOEC chronic crustacea 0.74 mg/l

Ethylbenzene (100-41-4)
LC50 - Fish [1] 5.1 mg/l Test organisms (species):Menidia menidia
EC50 - Crustacea [1] 1.8 – 2.4 mg/l (Exposure time: 48 h - Species: Daphnia magna)
LC50 - Fish [2] 4.2 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [semi-static])
LOEC (chronic) 1.7 mg/l Test organisms (species): Ceriodaphnia dubia Duration: '7 d'
**Ethylbenzene (100-41-4)**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOEC (chronic)</td>
<td>0.96 mg/l Test organisms (species): Ceriodaphnia dubia Duration: ’7 d’</td>
</tr>
<tr>
<td>NOEC chronic crustacea</td>
<td>0.956 mg/l</td>
</tr>
</tbody>
</table>

**hexane (110-54-3)**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>LC50 - Fish [1]</td>
<td>2.1 – 2.98 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])</td>
</tr>
</tbody>
</table>

**Naphthalene (91-20-3)**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>LC50 - Fish [1]</td>
<td>5.74 – 6.44 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])</td>
</tr>
<tr>
<td>EC50 - Crustacea [1]</td>
<td>2.16 mg/l (Exposure time: 48 h - Species: Daphnia magna)</td>
</tr>
<tr>
<td>LC50 - Fish [2]</td>
<td>1.6 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [flow-through])</td>
</tr>
<tr>
<td>EC50 - Crustacea [2]</td>
<td>1.96 mg/l (Exposure time: 48 h - Species: Daphnia magna [Flow through])</td>
</tr>
<tr>
<td>NOEC (chronic)</td>
<td>0.59 mg/l Test organisms (species): Daphnia pulex Duration: ’125 d’</td>
</tr>
<tr>
<td>NOEC chronic fish</td>
<td>≈ 0.37 mg/l Test organisms (species): Oncorhynchus kisutch Duration: ’40 d’</td>
</tr>
</tbody>
</table>

**nonane (111-84-2)**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>EC50 - Crustacea [1]</td>
<td>0.2 mg/l Test organisms (species): Daphnia magna</td>
</tr>
<tr>
<td>LOEC (chronic)</td>
<td>0.32 mg/l Test organisms (species): Daphnia magna Duration: ’21 d’</td>
</tr>
<tr>
<td>NOEC (chronic)</td>
<td>0.17 mg/l Test organisms (species): Daphnia magna Duration: ’21 d’</td>
</tr>
</tbody>
</table>

**Benzene, 1,2,4-trimethyl- (95-63-6)**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>LC50 - Fish [1]</td>
<td>7.19 – 8.28 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])</td>
</tr>
<tr>
<td>EC50 - Crustacea [1]</td>
<td>6.14 mg/l (Exposure time: 48 h - Species: Daphnia magna)</td>
</tr>
</tbody>
</table>

### 12.2. Persistence and degradability

19 Flashing Cement

Persistence and degradability

Not established.

### 12.3. Bioaccumulative potential

19 Flashing Cement

Bioaccumulative potential

Not established.

**Asphalt (8052-42-4)**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCF - Fish [1]</td>
<td>(no bioaccumulation expected)</td>
</tr>
<tr>
<td>Partition coefficient n-octanol/water</td>
<td>&gt; 6</td>
</tr>
</tbody>
</table>

**Xylenes (o-, m-, p- isomers) (1330-20-7)**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCF - Fish [1]</td>
<td>0.6 – 15</td>
</tr>
<tr>
<td>Partition coefficient n-octanol/water</td>
<td>2.77 – 3.15</td>
</tr>
</tbody>
</table>

**Toluene (108-88-3)**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Partition coefficient n-octanol/water</td>
<td>2.7</td>
</tr>
</tbody>
</table>

**Ethylbenzene (100-41-4)**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCF - Fish [1]</td>
<td>15</td>
</tr>
</tbody>
</table>
19 Flashing Cement
Safety Data Sheet

Ethylbenzene (100-41-4)
Partition coefficient n-octanol/water  3.2

Naphthalene (91-20-3)
BCF - Fish [1]  30 – 430
Partition coefficient n-octanol/water  3.6

Benzene, 1,2,4-trimethyl- (95-63-6)
Partition coefficient n-octanol/water  3.63

12.4. Mobility in soil
No additional information available

12.5. Other adverse effects
Other information  : No other effects known.

SECTION 13: Disposal considerations

13.1. Disposal methods
Product/Packaging disposal recommendations  : Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation. The generation of waste should be avoided or minimized wherever possible. Recycle empty containers where allowed. Empty containers may contain residues which are hazardous.
Additional information  : Handle empty containers with care because residual vapors are flammable.

SECTION 14: Transport information
In accordance with DOT / TDG / IMDG / IATA

14.1. UN number
DOT NA No  : Not regulated (if shipped in NON BULK packaging by ground transport) per DOT Exemption 173.150(1)(f)
UN-No. (TDG)  : Not regulated (if shipped in NON BULK packaging by ground transport) per TDG Exemption 1.33
UN-No. (IMDG)  : 1999
UN-No. (IATA)  : 1999

14.2. UN proper shipping name
Proper Shipping Name (DOT)  : Not regulated (if shipped in NON BULK packaging by ground transport) per DOT Exemption 173.150(1)(f)
Proper Shipping Name (TDG)  : Not regulated (if shipped in NON BULK packaging by ground transport) per TDG Exemption 1.33
Proper Shipping Name (IMDG)  : TARS, LIQUID
Proper Shipping Name (IATA)  : TARS, LIQUID

*Flammable for Air and Vessel transportation to non-US territories.

14.3. Transport hazard class(es)
DOT
Transport hazard class(es) (DOT)  : Not regulated
Hazard labels (DOT)  : Not regulated

TDG
Transport hazard class(es) (TDG)  : Not regulated
19 Flashing Cement
Safety Data Sheet

Hazard labels (TDG) : Not regulated

IMDG
Transport hazard class(es) (IMDG) : 3
Hazard labels (IMDG) : 3

IATA
Transport hazard class(es) (IATA) : 3
Hazard labels (IATA) : 3

14.4. Packing group
Packing group (DOT) : Not regulated
Packing group (TDG) : Not regulated
Packing group (IMDG) : III
Packing group (IATA) : III

14.5. Environmental hazards
Other information : No supplementary information available.

14.6. Special precautions for user
Special transport precautions : Do not handle until all safety precautions have been read and understood.
Marine pollutant : Product is not a marine pollutant
Emergency Response Guidebook No. : 130

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
Transport per UN1999 TARS LIQUID 3, PG III

SECTION 15: Regulatory information

15.1. US Federal regulations
All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory.

15.2. International regulations
No additional information available
19 Flashing Cement
Safety Data Sheet

15.3. US State regulations

⚠️ WARNING: This product can expose you to Benzene, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

SECTION 16: Other information


| Issue date | 12/31/2021 |
| Revision date | 6/27/2022 |
| Other information | None. |

Indication of changes:

Transport information. GHS classification.

Safety Data Sheet (SDS), USA

Disclaimer: We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind. The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. It is the user's responsibility to satisfy oneself as to the suitability and completeness of this information for the user's own particular use.