2. HAZARDS IDENTIFICATION

OSHA Regulatory Status
This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Carcinogenicity

Label elements

Emergency Overview

Warning

Hazard statements
Suspected of causing cancer
Appearance  Viscous  
Physical state  Liquid  
Odor  Low

Precautionary Statements - Prevention
Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Use personal protective equipment as required

Precautionary Statements - Response
IF exposed or concerned: Get medical advice/attention

Precautionary Statements - Storage
Store locked up

Precautionary Statements - Disposal
Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)
Not applicable

Other Information
Unknown acute toxicity  No information available

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Substance</th>
<th>Chemical Name</th>
<th>CAS No.</th>
<th>Weight-%</th>
<th>Trade Secret</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mixture</td>
<td>Water</td>
<td>7732-18-5</td>
<td>50 - 60%</td>
<td>*</td>
</tr>
<tr>
<td></td>
<td>Asphalt (at Ambient Temperature)</td>
<td>8052-42-4</td>
<td>20 - 30%</td>
<td>*</td>
</tr>
<tr>
<td></td>
<td>Limestone</td>
<td>1317-65-3</td>
<td>10 - 20%</td>
<td>*</td>
</tr>
<tr>
<td></td>
<td>Bentonite</td>
<td>1302-78-9</td>
<td>0 - 10%</td>
<td>*</td>
</tr>
<tr>
<td></td>
<td>Styrene Acrylic Polymer Emulsion</td>
<td>25036-16-2</td>
<td>0 - 10%</td>
<td>*</td>
</tr>
<tr>
<td></td>
<td>Carbon Black</td>
<td>1333-86-4</td>
<td>0 - 10%</td>
<td>*</td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES

Description of first aid measures

General advice
Under conditions of normal use, no hazards are anticipated which require special first aid measures.
Eye contact
In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Skin contact
Wash thoroughly with soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing before reuse. In the case of skin irritation or allergic reactions see a physician.

Inhalation
Move to fresh air in case of accidental inhalation of vapors. If continued difficulty with breathing is experienced, get medical attention immediately.

Ingestion
Not an expected route of exposure. If swallowed, do not induce vomiting. Get medical attention immediately.

Self-protection of the first aider
First aider: Pay attention to self-protection!

Most important symptoms and effects, both acute and delayed

Symptoms
May cause skin irritation. May cause eye irritation.

Indication of any immediate medical attention and special treatment needed

Note to physicians
Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Dry chemical. Carbon dioxide (CO2). Sand. Use foam or water FOG as a last resort.

Unsuitable extinguishing media
Do not use a solid water stream as it may scatter and spread fire.

Specific hazards arising from the chemical
No information available.

Hazardous combustion products
Thermal decomposition (burning) may release irritating, corrosive and/or toxic gases, vapors and fumes.

Explosion data
Sensitivity to Mechanical Impact Not sensitive.
Sensitivity to Static Discharge Not sensitive.

Protective equipment and precautions for firefighters
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions
No action should be taken involving any personal risk or without suitable training. Use personal protective equipment as required.

Other Information
Extremely slippery when spilled.

For emergency responders
Use personal protection recommended in Section 8.

Environmental precautions
Avoid release to the environment. Prevent further leakage or spillage if safe to do so.
Prevent product from entering sewers, drains, or waterways. Local authorities should be advised if significant spillages cannot be contained. See Section 12 for additional ecological information.

Methods and material for containment and cleaning up

Methods for containment
Contain spillage with non-combustible absorbent material, e.g. sand, earth, diatomaceous earth, vermiculite.

Methods for cleaning up
Pick up the absorbed material (described just above) and transfer to properly labeled containers for disposal according to local / national regulations (see Section 13).

Prevention of secondary hazards
Clean contaminated objects and areas thoroughly observing environmental regulations.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling
Use personal protective equipment as required. Use only outdoors.

Conditions for safe storage, including any incompatibilities

Storage Conditions
Keep from freezing. Keep containers tightly closed in a cool, dry, well-ventilated place.

Incompatible materials
Strong acids. Strong oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines
This product, as supplied, is not believed to contain any hazardous material that exceeds exposure limits established by OSHA.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
<th>NIOSH IDLH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asphalt (at Ambient Temperature) 8052-42-4</td>
<td>TWA: 0.5 mg/m³ benzene soluble aerosol fume, inhalable fraction</td>
<td>-</td>
<td>Ceiling: 5 mg/m³ fume 15 min</td>
</tr>
<tr>
<td>Limestone 1317-65-3</td>
<td>-</td>
<td>TWA: 15 mg/m³ total dust TWA: 5 mg/m³ respirable fraction (vacated) TWA: 15 mg/m³ total dust (vacated) TWA: 5 mg/m³ respirable fraction</td>
<td>TWA: 10 mg/m³ total dust TWA: 5 mg/m³ respirable dust</td>
</tr>
<tr>
<td>Bentonite 1302-78-9</td>
<td>TWA: 1 mg/m³ respirable fraction</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Carbon Black 1333-86-4</td>
<td>TWA: 3 mg/m³ inhalable fraction</td>
<td>TWA: 3.5 mg/m³ (vacated) TWA: 3.5 mg/m³</td>
<td>IDLH: 1750 mg/m³ TWA: 3.5 mg/m³ TWA: 0.1 mg/m³ Carbon black in presence of Polycyclic aromatic hydrocarbons PAH</td>
</tr>
</tbody>
</table>

Appropriate engineering controls

Engineering Controls
None under normal outdoor use conditions.

Individual protection measures, such as personal protective equipment

Eye/face protection
Wear safety glasses with side shields (or goggles).

Skin and body protection
Wear protective gloves and protective clothing that is resistant to chemical penetration.

Respiratory protection
No protective equipment is needed under normal use conditions.

General Hygiene Considerations
Wash face, hands and any exposed skin thoroughly after handling. Wash contaminated
clothing before reuse.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Remarks</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Liquid</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Appearance</td>
<td>Viscous</td>
<td>Odor Low</td>
<td></td>
</tr>
<tr>
<td>Color</td>
<td>Black</td>
<td>Odor threshold</td>
<td>Negligible odor</td>
</tr>
<tr>
<td>pH</td>
<td>Not Applicable</td>
<td>Not applicable</td>
<td></td>
</tr>
<tr>
<td>Melting point/freezing point</td>
<td>No information available</td>
<td>°C °F</td>
<td>No data available</td>
</tr>
<tr>
<td>Boiling point / boiling range</td>
<td>&gt; No information available</td>
<td>°C / °F</td>
<td></td>
</tr>
<tr>
<td>Flash point</td>
<td>Not Applicable °C / Not Applicable °F</td>
<td>Non Flammable</td>
<td></td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>The evaporation rate of the water component of this emulsion product is dependent upon: 1) The temperature of the water at the air-water surface; 2) The humidity of the air; 3) The area of the air-water surface; 4) The temperature of the air. No information available</td>
<td>No data available. Evaporation rate is dependent upon atmospheric conditions.</td>
<td></td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Non Flammable</td>
<td></td>
<td>Not flammable</td>
</tr>
<tr>
<td>Flammability Limit in Air</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upper flammability limit</td>
<td>Not Applicable</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lower flammability limit</td>
<td>Not Applicable</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>No information available</td>
<td>@ 20 °C</td>
<td></td>
</tr>
<tr>
<td>Vapor density</td>
<td>No information available</td>
<td>Where: Air = 1 at 68 degrees F (20 degrees C)</td>
<td>Water = 1g/ml</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>1.13 g/cm³</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water solubility</td>
<td>Dispersible</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Solubility in other solvents</td>
<td>No information available</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Partition coefficient</td>
<td>No information available</td>
<td>None</td>
<td>No data available</td>
</tr>
<tr>
<td>Autoignition temperature</td>
<td>No information available</td>
<td>°C / °F</td>
<td></td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No information available</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kinematic viscosity</td>
<td>No information available</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dynamic viscosity</td>
<td>No information available</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Explosive properties</td>
<td>Not an explosive</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oxidizing properties</td>
<td>None</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Softening point</td>
<td>No information available</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Molecular weight</td>
<td>No information available</td>
<td></td>
<td></td>
</tr>
<tr>
<td>VOC Content (%)</td>
<td>No information available</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Density</td>
<td>9.4 lb/gal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bulk density</td>
<td>No information available</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

10. STABILITY AND REACTIVITY

Reactivity
Not applicable

Chemical stability
Stable.

Possibility of Hazardous Reactions
None under normal use.

Hazardous polymerization
Hazardous polymerization does not occur.
Conditions to avoid
None known.
Incompatible materials
Strong acids. Strong oxidizing agents.
Hazardous Decomposition Products
Combustion may produce carbon monoxide, carbon dioxide, and other asphyxiants.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Toxicological testing has not been conducted for this product overall. Available toxicological data for individual ingredients are summarized below.

Inhalation
Avoid breathing vapors or mists.

Eye contact
Avoid contact with eyes. Contact with eyes may cause irritation.

Skin contact
May cause irritation.

Ingestion
If swallowed, do not induce vomiting. Get medical attention immediately. Not an expected route of exposure.

Component Information

* The IARC Monograph (Vol. 103, 2013, Bitumen and Bitumen Emissions) defines Asphalt as 'Group 2B, Possible Carcinogen to Humans'. This definition is based on studies of exposure to Asphalt fumes at elevated temperatures. The Monograph states that temperature plays an important role in determining the degree of exposure and also the carcinogenic potential of bitumen emissions. This same Monograph states that Asphalt is non-volatile at ambient temperature. There is no data presented in the Monograph to demonstrate that Asphalt at ambient temperature is considered a carcinogen. Since the normal use of this product is at ambient temperature, the Asphalt used in this product is not listed as a carcinogen. No other national or international agency has defined Asphalt as a carcinogen.

* The IARC Monograph (Vol. 93, 2010, Carbon Black, Titanium Dioxide, Talc) states: “Operators in user industries who handle fluffy or pelleted Carbon Black during rubber, paint and ink production are expected to have significantly lower exposures to Carbon Black than workers in Carbon Black production. Other workers in user industries who handle it occasionally have little opportunity for exposure. And further…” End-users of these products (rubber, ink or paint) are unlikely to be exposed to airborne Carbon Black particles, which are bound within the product matrix.”

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Oral LD₅₀ (Rat)</th>
<th>Dermal LD₅₀ (Rabbit)</th>
<th>Inhalation LC₅₀</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asphalt (at Ambient Temperature) 8052-42-4</td>
<td>&gt; 5000 mg/kg</td>
<td>&gt; 2000 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td>Bentonite 1302-78-9</td>
<td>&gt; 5000 mg/kg</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Carbon Black 1333-86-4</td>
<td>&gt; 15400 mg/kg</td>
<td>&gt; 3 g/kg (Rabbit)</td>
<td>-</td>
</tr>
</tbody>
</table>

Information on toxicological effects

Symptoms
No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation
Can cause skin irritation.

Serious eye damage/eye irritation
Irritating to eyes.

Irritation
Irritating to eyes and skin.

Corrosivity
Not classified.

Sensitization
May cause sensitization of susceptible persons.

Germ cell mutagenicity
This product does not contain any ingredients that cause germ cell mutagenicity.
Carcinogenicity

The table below indicates whether each agency (ACGIH, IARC, NTP, or OSHA) has listed any ingredient as a carcinogen.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH</th>
<th>NTP</th>
<th>OSHA</th>
<th>Carbon Black 1333-86-4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A3</td>
<td></td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

Legend

ACGIH (American Conference of Governmental Industrial Hygienists)
- A1: Known Human Carcinogen
- A2: Suspected Human Carcinogen
- A3: Animal Carcinogen
- A4: Not Classifiable as a Human Carcinogen

IARC (International Agency for Research on Cancer)
- Group 1: Carcinogenic to Humans
- Group 2A: Probably Carcinogenic to Humans
- Group 2B: Possibly Carcinogenic to Humans
- Group 3: Not classifiable as a human carcinogen.

NTP (National Toxicology Program)
- Known - Known Carcinogen
- Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen

OSHA (Occupational Safety and Health Administration of the US Department of Labor)
- X - Present

Reproductive toxicity
None known.

Developmental Toxicity
None known.

Teratogenicity
None known.

STOT - single exposure
No information available.

STOT - repeated exposure
No information available.

Aspiration hazard
No information available.

Numerical measures of toxicity - Product Information

The following values are calculated based on chapter 3.1 of the GHS document. For exterior use only. Do not use indoors.

- ATEmix (oral) 27,674.00
- ATEmix (dermal) 13,830.00

12. ECOLOGICAL INFORMATION

Ecotoxicity

25.5% of the mixture consists of components(s) of unknown hazards to the aquatic environment.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Algae/aquatic plants</th>
<th>Fish</th>
<th>Crustacea</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bentonite 1302-78-9</td>
<td>-</td>
<td>19000: 96 h Oncorhynchus mykiss mg/L LC50 static 8.0 - 19.0: 96 h Salmo gairdneri g/L LC50</td>
<td>-</td>
</tr>
<tr>
<td>Carbon Black 1333-86-4</td>
<td>-</td>
<td>-</td>
<td>5600: 24 h Daphnia magna mg/L EC50</td>
</tr>
</tbody>
</table>

Persistence and degradability
No information available.

Bioaccumulation
No information available.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Partition coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asphalt (at Ambient Temperature) 8052-42-4</td>
<td>6</td>
</tr>
</tbody>
</table>

Other adverse effects
No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods
Disposal of wastes

Disposal should be in accordance with applicable local, regional, national and international laws and regulations.

Contaminated packaging

Do not reuse container.

### 14. TRANSPORT INFORMATION

**Note:**

This material is not subject to regulation as a hazardous material for shipping

**DOT**

Not regulated.

**TDG**

Not regulated.

**MEX**

Not regulated.

**ICAO (air)**

Not regulated.

**IATA**

Not regulated.

**IMDG**

Not regulated.

**RID**

Unknown

**ADR**

Unknown

**ADN**

Unknown

### 15. REGULATORY INFORMATION

**International Inventories**

**TSCA**

All of the components of this product are listed on the US TSCA (Toxic Substances Control Act) Inventory or are exempt.

**DSL/NDSL**

All of the components of this product are listed on the DSL.

**Legend:**

- **TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory
- **DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List
- **EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
- **ENCS** - Japan Existing and New Chemical Substances
- **IECSC** - China Inventory of Existing Chemical Substances
- **KECL** - Korean Existing and Evaluated Chemical Substances
- **PICCS** - Philippines Inventory of Chemicals and Chemical Substances
- **AICS** - Australian Inventory of Chemical Substances

**US Federal Regulations**

**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

**SARA 311/312 Hazard Categories**

<table>
<thead>
<tr>
<th>Hazard Category</th>
<th>Yes/No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute health hazard</td>
<td>No</td>
</tr>
<tr>
<td>Chronic Health Hazard</td>
<td>No</td>
</tr>
<tr>
<td>Fire hazard</td>
<td>No</td>
</tr>
<tr>
<td>Sudden release of pressure hazard</td>
<td>No</td>
</tr>
<tr>
<td>Reactive Hazard</td>
<td>No</td>
</tr>
</tbody>
</table>
**CWA (Clean Water Act)**
This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

**CERCLA**
This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302).

**US State Regulations**

**California Proposition 65**
This product contains the following Proposition 65 chemicals

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>California Proposition 65</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon Black - 1333-86-4</td>
<td>Carcinogen</td>
</tr>
</tbody>
</table>

**U.S. State Right-to-Know Regulations**
This product contains the following substances regulated by various State Right-to-Know regulations.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>New Jersey</th>
<th>Massachusetts</th>
<th>Pennsylvania</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asphalt (at Ambient Temperature)</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>8052-42-4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Limestone</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>1317-65-3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carbon Black</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>1333-86-4</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**U.S. EPA Label Information**

**EPA Pesticide Registration Number** Not applicable

**16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION**

<table>
<thead>
<tr>
<th>NFPA</th>
<th>Health hazards</th>
<th>Flammability</th>
<th>Instability</th>
<th>Physical and Chemical Properties</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HMIS</th>
<th>Health hazards</th>
<th>Flammability</th>
<th>Physical hazards</th>
<th>Personal protection</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

**Prepared By**
FBC Administrative Services Department

**Issue Date**
07-Apr-2015

**Revision Date**
13-May-2015

**Revision Note**
2

**Disclaimer**
The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet