## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1. Product identifier

<table>
<thead>
<tr>
<th>Product form</th>
<th>Mixture</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product name</td>
<td>Anionic Asphalt Emulsion EM-50-TT</td>
</tr>
<tr>
<td>Product code</td>
<td>EM-50-TT</td>
</tr>
</tbody>
</table>

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture: Asphalt Emulsion

### 1.3. Details of the supplier of the safety data sheet

Seaboard Asphalt Products Co.
3601 Fairfield Road
Baltimore, MD 21226
1-800-563-0332

### 1.4. Emergency telephone number

Emergency number: CHEMTREC 1-800-424-9300

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

**Classification (GHS-US)**

- Skin Sens. 1: H317
- Carc. 2: H351

### 2.2. Label elements

**GHS-US labeling**

<table>
<thead>
<tr>
<th>Hazard pictograms (GHS-US)</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="GHS07" /></td>
</tr>
<tr>
<td><img src="image" alt="GHS08" /></td>
</tr>
</tbody>
</table>

**Signal word (GHS-US)**: Warning

**Hazard statements (GHS-US)**:

- H317 - May cause an allergic skin reaction
- H351 - Suspected of causing cancer

**Precautionary statements (GHS-US)**:

- P201 - Obtain special instructions before use
- P202 - Do not handle until all safety precautions have been read and understood
- P261 - Avoid breathing vapors
- P272 - Contaminated work clothing should not be allowed out of the workplace
- P280 - Wear protective gloves/protective clothing/eye protection/face protection
- P302+P352 – If on skin: Wash with plenty of soap and water
- P308+P313 - If exposed or concerned: Get medical advice/attention
- P333+P313 - If skin irritation or rash occurs: Get medical advice/attention
- P362+P364 - Take off contaminated clothing and wash it before reuse

### 2.3. Other hazards

Other hazards not contributing to the classification: Vapors and gases from heated asphalt may contain hydrogen sulfide and may be irritating to the eyes and skin. Skin contact with asphalt may cause skin irritation and allergic reactions in some individuals. Hot material may cause burns.

### 2.4. Unknown acute toxicity (GHS-US)

None of the ingredients in the mixture are of unknown toxicity.

## SECTION 3: Composition/information on ingredients

### 3.1. Substance

Not applicable – product is a mixture

### 3.2. Mixture

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier (CAS No.)</th>
<th>%</th>
<th>Classification (GHS-US)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asphalt</td>
<td>8052-42-4</td>
<td>50 – 80*</td>
<td>Carc. 2, H351</td>
</tr>
</tbody>
</table>
Anionic Asphalt Emulsion
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<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
<th>Classification (GHS-US)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proprietary Asphalt Additive*</td>
<td>Proprietary*</td>
<td>&lt; 5*</td>
<td>Acute Tox. 4 (Inhalation), H332 Skin Irrit. 2, H315 Eye Irrit. 2A, H319</td>
</tr>
<tr>
<td>Proprietary Asphalt Additive*</td>
<td>Proprietary*</td>
<td>&lt; 1*</td>
<td>Acute Tox. 4 (Oral), H302 Skin Corr. 1A, H314 Eye Dam. 1, H318 Skin Sens. 1, H317</td>
</tr>
</tbody>
</table>

*The exact identities and concentrations of some ingredients have been withheld as a trade secret

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the product label where possible). Suspected of causing cancer.

First-aid measures after inhalation : Allow victim to breathe fresh air. Allow the victim to rest.

First-aid measures after skin contact : Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. For hot product, immediately immerse in or flush the affected area with large amounts of cold water to dissipate heat. Cover with clean cotton sheeting or gauze and seek medical attention. No attempt should be made to remove material from skin.

First-aid measures after eye contact : Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persist.

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries after inhalation : May cause an allergic skin reaction.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media


Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

No additional information available

5.3. Advice for firefighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Contain all water used for fire-fighting to the greatest extent possible.

Protection during firefighting : Do not enter fire area without proper protective equipment, including NIOSH approved positive-pressure breathing apparatus with full face mask and full protective equipment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.

Emergency procedures : Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.
SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor. Avoid breathing vapors. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.

Hygiene measures: Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Keep only in the original container in a cool, well ventilated place away from oxidizers, excessive heat, and open flame. Keep container closed when not in use. Do not freeze.

Incompatible products: Strong bases. Strong acids.

Incompatible materials: Sources of ignition. Direct sunlight.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

<table>
<thead>
<tr>
<th>Asphalt (8052-42-4)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>USA ACGIH</td>
<td>ACGIH TWA (mg/m³)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Hydrogen Sulfide (7783-06-4) may be released from this product</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>USA ACGIH</td>
<td>ACGIH TWA (ppm)</td>
</tr>
<tr>
<td>USA ACGIH</td>
<td>ACGIH STEL (ppm)</td>
</tr>
<tr>
<td>USA OSHA</td>
<td>OSHA PEL (ppm) (Vacated limits)</td>
</tr>
<tr>
<td>USA OSHA</td>
<td>OSHA STEL (ppm) (Vacated limits)</td>
</tr>
<tr>
<td>USA OSHA</td>
<td>OSHA Ceiling (ppm)</td>
</tr>
</tbody>
</table>

8.2. Exposure controls

Appropriate engineering controls: Ensure that proper ventilation is provided to maintain exposures below regulated limits.

Personal protective equipment: Avoid all unnecessary exposure. At a minimum wear long sleeved cotton shirt buttoned at the collar and full length cotton pants. Synthetic fibers can melt and adhere to the skin when heated. Do not fold back or roll up cuffs.

Hand protection: Wear protective gloves that protect against thermal burns when handling hot material.

Eye protection: Chemical goggles or safety glasses.

Respiratory protection: Not typically required. In cases where exposures exceed occupational control limits, a NIOSH approved respirator is recommended.

Other information: Do not eat, drink or smoke during use. Wash hands and other exposed areas after use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Physical state</th>
<th>Liquid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color</td>
<td>Dark brown</td>
</tr>
<tr>
<td>Odor</td>
<td>Organic</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>8 - 12</td>
</tr>
<tr>
<td>Relative evaporation rate (butyl acetate=1)</td>
<td>No data available</td>
</tr>
<tr>
<td>Melting point</td>
<td>No data available</td>
</tr>
<tr>
<td>Freezing point</td>
<td>&lt; 0 °C</td>
</tr>
<tr>
<td>Boiling point</td>
<td>&gt; 100 °C</td>
</tr>
<tr>
<td>Flash point</td>
<td>No data available</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No data available</td>
</tr>
</tbody>
</table>
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Flammability (solid, gas) : No data available
Vapor pressure : No data available
Relative vapor density at 20 °C : No data available
Relative density : 0.9 - 1.1
Solubility : Water: Dispersible
Log Pow : No data available
Log Kow : No data available
Viscosity, kinematic : No data available
Viscosity, dynamic : No data available
Explosive properties : No data available
Oxidizing properties : No data available
Explosive limits : No data available

9.2. Other information
No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity
No additional information available

10.2. Chemical stability
Stable under normal conditions of use, storage and transport.

10.3. Possibility of hazardous reactions
Not established.

10.4. Conditions to avoid
Extreme heat and open flames.

10.5. Incompatible materials
Strong acids. Strong bases.

10.6. Hazardous decomposition products
Hydrogen sulfide and other toxic vapors may be given off when heated excessively. Carbon monoxide. Carbon dioxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects
Likely routes of exposure : Inhalation; Skin and eye contact
Acute toxicity : Not classified

Asphalt (8052-42-4)
LD50 oral rat > 5000 mg/kg
LD50 dermal rabbit > 2000 mg/kg
Skin corrosion/irritation : Not classified
pH: 8 - 12
Serious eye damage/irritation : Not classified
pH: 8 - 12
Respiratory or skin sensitization : May cause an allergic skin reaction.
Germ cell mutagenicity : Not classified
Carcinogenicity : Suspected of causing cancer.

Asphalt (8052-42-4)
IARC group 2B - Possibly carcinogenic to humans
National Toxicity Program (NTP) Status 5 - Twelfth Report - Items under consideration
Reproductive toxicity : Not classified
Specific target organ toxicity (single exposure) : Not classified
Specific target organ toxicity (repeated exposure) : Not classified
Aspiration hazard : Not classified
### Anionic Asphalt Emulsion EM-50-TT

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#### Potential Adverse human health effects and symptoms

Vapors and gases from heated asphalt may contain hydrogen sulfide and may cause eye, skin and respiratory tract irritation, headache and nausea. Ingestion or contact of hot material may cause burns on eyes, skin or gastrointestinal system. Asphalt may cause skin irritation with reddening, itching, burning and/or swelling and may cause allergic skin reaction in some individuals.

**Symptoms/injuries after inhalation:** May cause an allergic skin reaction.

---

#### SECTION 12: Ecological information

**12.1. Toxicity**

No additional information available

**12.2. Persistence and degradability**

<table>
<thead>
<tr>
<th>Anionic Asphalt Emulsion EM-50-TT</th>
<th>Persistence and degradability</th>
<th>Not established.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asphalt (8052-42-4)</td>
<td>Persistence and degradability</td>
<td>Not established.</td>
</tr>
</tbody>
</table>

**12.3. Bioaccumulative potential**

<table>
<thead>
<tr>
<th>Anionic Asphalt Emulsion EM-50-TT</th>
<th>Bioaccumulative potential</th>
<th>Not established.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asphalt (8052-42-4)</td>
<td>BCF fish 1</td>
<td>(no bioaccumulation expected)</td>
</tr>
<tr>
<td></td>
<td>Log Pow</td>
<td>&gt; 6</td>
</tr>
<tr>
<td></td>
<td>Bioaccumulative potential</td>
<td>Not established.</td>
</tr>
</tbody>
</table>

**12.4. Mobility in soil**

No additional information available

**12.5. Other adverse effects**

Other information: Avoid release to the environment.

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#### SECTION 13: Disposal considerations

**13.1. Waste treatment methods**

Waste disposal recommendations: Dispose in a safe manner in accordance with local, state, and federal regulations.

Ecology - waste materials: Avoid release to the environment.

---

#### SECTION 14: Transport information

In accordance with DOT

Not regulated for transport

**Additional information**

**ADR**

No additional information available

**Transport by sea**

No additional information available

**Air transport**

No additional information available

---

#### SECTION 15: Regulatory information

**15.1. US Federal regulations**

<table>
<thead>
<tr>
<th>Anionic Asphalt Emulsion EM-50-TT</th>
<th>SARA Section 311/312 Hazard Classes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immediate (acute) health hazard</td>
<td></td>
</tr>
<tr>
<td>Delayed (chronic) health hazard</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Asphalt (8052-42-4)</th>
<th>Listed on the United States TSCA (Toxic Substances Control Act) inventory</th>
</tr>
</thead>
</table>
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15.2. International regulations

CANADA

Asphalt (8052-42-4)
Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

Asphalt (8052-42-4)
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

Classification according to Regulation (EC) No. 1272/2008 [CLP]
No additional information available

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]
No additional information available

15.2.2. National regulations

Asphalt (8052-42-4)
Listed on the AICS (Australian Inventory of Chemical Substances)
Listed on IECS (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
Listed on the Korean ECL (Existing Chemicals List)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)

15.3. US State regulations

California - Proposition 65
WARNING: This product contains chemicals known to the State of California to cause cancer.

SECTION 16: Other information

Other information: None.

Full text of H-phrases:

<table>
<thead>
<tr>
<th>Acute Tox. 4 (Inhalation)</th>
<th>Acute toxicity (inhalation) Category 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Tox. 4 (Oral)</td>
<td>Acute toxicity (oral) Category 4</td>
</tr>
<tr>
<td>Carc. 2</td>
<td>Carcinogenicity Category 2</td>
</tr>
<tr>
<td>Eye Dam. 1</td>
<td>Serious eye damage/eye irritation Category 1</td>
</tr>
<tr>
<td>Eye Irrit. 2A</td>
<td>Serious eye damage/eye irritation Category 2A</td>
</tr>
<tr>
<td>Flam. Liq. Not classified</td>
<td>Flammable liquids Not classified</td>
</tr>
<tr>
<td>Skin Corr. 1A</td>
<td>Skin corrosion/irritation Category 1A</td>
</tr>
<tr>
<td>Skin Irrit. 2</td>
<td>Skin corrosion/irritation Category 2</td>
</tr>
<tr>
<td>Skin Sens. 1</td>
<td>Skin sensitization Category 1</td>
</tr>
<tr>
<td>H302</td>
<td>Harmful if swallowed</td>
</tr>
<tr>
<td>H314</td>
<td>Causes severe skin burns and eye damage</td>
</tr>
<tr>
<td>H315</td>
<td>Causes skin irritation</td>
</tr>
<tr>
<td>H317</td>
<td>May cause an allergic skin reaction</td>
</tr>
<tr>
<td>H318</td>
<td>Causes serious eye damage</td>
</tr>
<tr>
<td>H319</td>
<td>Causes serious eye irritation</td>
</tr>
<tr>
<td>H332</td>
<td>Harmful if inhaled</td>
</tr>
<tr>
<td>H351</td>
<td>Suspected of causing cancer</td>
</tr>
</tbody>
</table>

SDS US (GHS HazCom 2012)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.