SAFETY DATA SHEET

Issuing Date 12-Jun-2017  Revision Date N/A  Revision Number N/A

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

GHS Product Identifier
Product Name: SS-1h Asphalt Emulsion

Other Means of Identification
Product Code(s): N/A
Synonyms: None

Recommended Use of the Chemical and Restrictions on Use
Recommended Use: No Information Available
Uses Advised Against: No Information Available

Manufacturer’s Details
Supplier’s Address
ThorWorks Industries, Inc.
2520 S. Campbell St.
Sandusky, OH 44870
www.sealmaster.net
1-800-326-1994

Emergency Telephone Number
Chemtrec 1-800-424-9300

2. HAZARDS IDENTIFICATION

Classification
This product is not considered hazardous according to the OSHA Hazard Communication Standard 2012 (29 CFR 1910.1200).

GHS Label Elements, Including Precautionary Statements

<table>
<thead>
<tr>
<th>Signal Word</th>
<th>Warning</th>
</tr>
</thead>
<tbody>
<tr>
<td>!</td>
<td>●Harmful if swallowed&lt;br&gt;●May cause skin irritation</td>
</tr>
</tbody>
</table>

Emergency Overview

Appearance: Black  Physical State: Mastic  Odor: Asphaltic

Precautionary Statements

Prevention
Inhalation: May cause irritation of respiratory tract.
Eye Contact: Contact with eyes may cause irritation.
Skin Contact: May cause irritation.
Ingestion: Ingestion may cause stomach discomfort.

General Advice
None

Storage
Keep container tightly closed

Disposal
Dispose of material/containers in accordance with the appropriate state, regional, or local regulations.

Hazard Not Otherwise Classified (HNOC)
Not applicable
3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS Number</th>
<th>Weight %</th>
<th>Trade Secret</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asphalt</td>
<td>8052-42-4</td>
<td>50-70</td>
<td>*</td>
</tr>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>25-45</td>
<td>*</td>
</tr>
<tr>
<td>Proprietary Ing</td>
<td>-</td>
<td>&lt; 5</td>
<td>*</td>
</tr>
</tbody>
</table>

*The exact percentage of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

**Description of Necessary First-Aid Measures**

**Eye Contact**
Rinse thoroughly with plenty of water, also under the eyelids. If symptoms persist, call a physician.

**Skin Contact**
Wash off immediately with soap and plenty of water. In the case of skin irritation or allergic reactions, see a physician.

**Inhalation**
Move to fresh air. If symptoms persist, call a physician.

**Ingestion**
Drink plenty of water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Consult a physician if necessary.

**Most Important Symptoms/Effects, Acute and Delayed**

**Indication of Immediate Medical Attention and Special Treatment Needed, If Necessary**

**Notes to Physician**
Treat Symptomatically. May cause sensitization by skin contact.

5. FIRE-FIGHTING MEASURES

**Suitable Extinguishing Media**

**Unsuitable Extinguishing Media**
CAUTION: Use of water spray when fighting fire may be inefficient.

**Specific Hazards Arising from the Chemical**
No information available

**Explosion Data**
Sensitivity to Mechanical Impact: None
Sensitivity to Static Discharge: None

**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:**
Ensure adequate ventilation. Avoid contact with skin, eyes and clothing. Use personal protective equipment.

**Environmental Precautions**

**Environmental Precautions:**
See Section 12 for additional Ecological Information

**Methods and Materials for Containment and Cleaning Up**

**Methods for Containment:**
Prevent further leakage or spillage if safe to do so.

**Methods for Cleaning Up:**
Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers. Clean contaminated surface thoroughly.
7. HANDLING AND STORAGE

Precautions for Safe Handling
Handling: Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes, and clothing. Wear personal protective equipment. Avoid breathing vapors or mists. Do not eat, drink, or smoke when using this product. Wash thoroughly after handling.

Conditions for Safe Storage, Including Any Incompatibilities
Storage: Keep container tightly closed

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control Parameters
Exposure Guidelines

<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 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>
</tbody>
</table>

Appropriate Engineering Controls
Engineering Measures: Showers
Eyewash Stations
Ventilation Systems

Individual Protection Measures, such as Personal Protective Equipment

Eye/Face Protection: If splashes are likely to occur, wear: Safety glasses with side shields.
Skin and Body Protection: If protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn.
Respiratory Protection: No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn.
Hygiene Measures: Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on Basic Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Remarks/Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical State</td>
<td>Liquid</td>
<td></td>
</tr>
<tr>
<td>Odor:</td>
<td>Asphaltic</td>
<td></td>
</tr>
<tr>
<td>Appearance:</td>
<td>Black</td>
<td></td>
</tr>
<tr>
<td>Odor Threshold:</td>
<td>No Information Available</td>
<td></td>
</tr>
<tr>
<td>pH</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Melting Point/Range</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Boiling Point/Boiling Range</td>
<td>100° C</td>
<td>None known</td>
</tr>
<tr>
<td>Flash Point</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>1.8</td>
<td>None known</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Flammability Limits in Air</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upper flammability limit</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Lower flammability limit</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>&lt;1</td>
<td>None known</td>
</tr>
<tr>
<td>Specific Density</td>
<td>1.01 @ 77 F</td>
<td>None known</td>
</tr>
<tr>
<td>Water Solubility</td>
<td>Easily dispersible</td>
<td>None known</td>
</tr>
<tr>
<td>Solubility in other solvents</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Autoignition Temperature</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Decomposition Temperature</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Viscosity</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Flammable Properties</td>
<td>Not Flammable</td>
<td></td>
</tr>
<tr>
<td>Explosive Properties</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>Oxidizing Properties</td>
<td>No data available</td>
<td></td>
</tr>
</tbody>
</table>
10. STABILITY AND REACTIVITY

Reactivity: No data available
Chemical Stability: Stable under recommended storage conditions.
Possibility of Hazardous Reactions: None under normal processing.
Hazardous Polymerization: Hazardous polymerization does not occur.
Conditions to Avoid: None known
Hazardous Decomposition Products: Carbon Monoxide (CO), Carbon Dioxide (CO₂), Hydrogen Sulfide, Nitrogen Dioxide

11. TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure
Product Information
- Inhalation: May cause irritation of respiratory tract.
- Eye Contact: Contact with eyes may cause irritation.
- Skin Contact: May cause irritation.
- Ingestion: Ingestion may cause stomach discomfort.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>LD50 Oral</th>
<th>LD50 Dermal</th>
<th>LD50 Inhalation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asphalt</td>
<td>5000 mg/kg (Rat)</td>
<td>&gt;2000 mg/kg (Rabbit)</td>
<td>-</td>
</tr>
</tbody>
</table>

Symptoms Related to the Physical, Chemical, and Toxicological Characteristics
Symptoms: No information available.

Delayed and Immediate Effects and also Chronic Effects from Short and Long Term Exposure
- Sensitization: No information available.
- Mutagenic Effects: No information available.
- Carcinogenicity: The table below indicates whether each agency has listed any ingredient as a carcinogen. The IARC, NTP, and OSHA do not list asphalt as a carcinogen. In general, the oxidation of polycyclic aromatic hydrocarbons destroys their carcinogenic potential. Petroleum asphalt, shale oil asphalts, and coal tars show distinct variation in their relative carcinogenicity for experimental animals.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH</th>
<th>IARC</th>
<th>NTP</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asphalt</td>
<td>A3</td>
<td>Group 2B</td>
<td>Reasonably Anticipated</td>
<td>X</td>
</tr>
</tbody>
</table>

ACGIH: (American Conference of Governmental Industrial Hygienists)
A3 – Animal Carcinogen
IRAC: (International Agency for Research on Cancer)
Group 2B – Possibly Carcinogenic to Humans
NTP: (National Toxicity Program)
Reasonably Anticipated – Reasonably Anticipated to be a Human Carcinogen
OSHA: (Occupational Safety & Health Administration)
X – Present

Reproductive Toxicity: No information available.
STOT - Single Exposure: No information available.
STOT – Repeated Exposure: No information available.
Aspiration Hazard: No information available.

12. ECOLOGICAL INFORMATION

Ecotoxicity
The environmental impact of this product has not been fully investigated.

Persistence and Degradability: No information available.
Bioaccumulation

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Log Pow</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asphalt</td>
<td>6.006</td>
</tr>
</tbody>
</table>

Other Adverse Effects: No information available.
13. DISPOSAL CONSIDERATIONS

Waste Disposal Methods: This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste. Consult the appropriate state, regional, or local regulations for additional requirements.

Contaminated Packaging: Do not re-use empty containers.

14. TRANSPORTATION INFORMATION

DOT: Not regulated

ICAO/IATA Not regulated as a hazardous material or dangerous goods for transportation.

15. REGULATORY INFORMATION

International Inventories

TSCA – Complies
DSL/NDSL – Complies

Legend

TSCA – United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL – Canadian Domestic Substances List/Non-Domestic Substances List

U.S. Federal Regulations

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS Number</th>
<th>Weight %</th>
<th>SARA 313 – Threshold Values %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asphalt</td>
<td>8052-42-4</td>
<td>20-40</td>
<td>0.1</td>
</tr>
</tbody>
</table>

SARA 311/312 Hazard Categories

- Acute Health Hazard: No
- Chronic Health Hazard: No
- Fire Hazard: No
- Sudden Release of Pressure Hazard: No
- Reactive Hazard: No

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) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific requirements at the local, regional, or state level pertaining to releases of this material.

U.S. State Regulations

California Proposition 65: This product does not contain any Proposition 65 chemicals.

U.S. State Right-To-Know Regulations

“X” designates that the ingredients are listed on the state right to know list.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>New Jersey</th>
<th>Massachusetts</th>
<th>Pennsylvania</th>
<th>Illinois</th>
<th>Rhode Island</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asphalt</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

U.S. EPA Label Information

EPA Pesticide Registration Number: Not applicable
## 16. OTHER INFORMATION

<table>
<thead>
<tr>
<th>NFPA</th>
<th>Health Hazard:</th>
<th>Flammability:</th>
<th>Instability:</th>
<th>Physical and Chemical Hazards-Physical Hazard:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HMIS</th>
<th>Health Hazard:</th>
<th>Flammability:</th>
<th>Physical Hazard:</th>
<th>Personal Protection:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>X</td>
</tr>
</tbody>
</table>

**Revision Date:** 12-Jun-2017  
**Revision Note:**

**General Disclaimer**

The information provided on this SDS 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 guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text.