SAFETY DATA SHEET

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

GHS Product Identifier

Product Name: SBS Adhesive Mastic

Other Means of Identification

Product Code(s): H9100
SKU#: 153-6009
Synonyms None

Recommended Use of the Chemical and Restrictions on Use

Recommended Use: Used to repair or rebuild roofing materials.
Uses Advised Against: For Exterior Use Only

Manufacturer’s Details

Manufacturer Address
ThorWorks Industries, Inc.
2520 S. Campbell St.
Sandusky, OH 44870
www.sealbest.com
1-800-326-1994

Emergency Telephone Number

Chemtrec 1-800-424-9300

2. HAZARDS IDENTIFICATION

Classification

This chemical is considered hazardous according to the OSHA Hazard Communication Standard 2012 (29 CFR 1910.1200).

<table>
<thead>
<tr>
<th>Hazard Class</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin Corrosion/Irritation</td>
<td>Category 2</td>
</tr>
<tr>
<td>Serious Eye Damage, Eye Irritation</td>
<td>Category 2A</td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td>Category 1A</td>
</tr>
<tr>
<td>Flammable Liquids</td>
<td>Category 3</td>
</tr>
</tbody>
</table>

GHS Label Elements, Including Precautionary Statements

Emergency Overview

- Signal Word: Warning
- Flammable Liquid and Vapor
- Harmful or Fatal if Swallowed
- May Cause Cancer

- Appearance: Black
- Physical State: Mastic
- Odor: Solvent (Mineral Spirits)
Precautionary Statements

Prevention
● Obtain Special Instructions Before Use
● Use Personal Protection as Required
● Avoid Breathing Dust/Mist/Vapor/Spray/Fume
● Do Not Eat, Drink, or Smoke When Using This Product
● Keep Container Tightly Closed When Not in Use
● Keep Away From Heat, Open Flame, Spark, or Hot Surfaces

General Advice
● None

Storage
● Store in a Well Ventilated, Cool Place

Disposal
● Dispose in Accordance with Local, Regional, National, and International 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>20-50</td>
<td>*</td>
</tr>
<tr>
<td>Mineral Spirits</td>
<td>8052-41-3</td>
<td>10-40</td>
<td>*</td>
</tr>
<tr>
<td>Sodium Potassium Aluminum Silicate</td>
<td>93763-70-3</td>
<td>0-10</td>
<td>*</td>
</tr>
<tr>
<td>Cellulose Fiber</td>
<td>9004-34-6</td>
<td>0-10</td>
<td>*</td>
</tr>
<tr>
<td>Aromatic 100</td>
<td>64742-95-6</td>
<td>0-10</td>
<td>*</td>
</tr>
<tr>
<td>SBS Block Polymer</td>
<td>9033-55-8</td>
<td>0-10</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. Get medical attention immediately.

Most Important Symptoms/Effects, Acute and Delayed
May cause Eye and Skin Irritation

Indication of Immediate Medical Attention and Special Treatment Needed, If Necessary
Treat Symptomatically. May cause sensitization by skin contact.

Notes to Physician

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Unsuitable Extinguishing Media
CAUTION: Do Not Use Solid Stream of Water.

Specific Hazards Arising from the Chemical
Combustible Liquid. Sealed Containers May Burst when Heated

Explosion Data
Sensitivity to Mechanical Impact
Not Sensitive

Sensitivity to Static Discharge
May Be Ignited by Heat, Flames, or Sparks

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. Eliminate all ignition sources. Emergency responders should use personal protection described in Section 8.
Environmental Precautions

Prevent entry into the environment. Alert Local Authorities if significant spillages cannot be contained. 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 in accordance to environmental regulations.

7. HANDLING AND STORAGE

Precautions for Safe Handling

Handling: Handle in accordance with good industrial hygiene and safety practice. Remove all sources of ignition. 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. Keep away from heat, sources of ignition, flame and spark. Store in a cool, well ventilated area.


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>Mineral Spirits 8052-41-3</td>
<td>TWA: 100 ppm</td>
<td>TWA: 500 ppm  TWA: 2900 mg/m³ (vacated) TWA: 100 ppm (vacated) TWA: 525 mg/m³</td>
<td>IDLH: 20000 mg/m³ Ceiling: 180 mg/m³ 15 min. TWA: 350 mg/m³</td>
</tr>
<tr>
<td>Sodium Potassium Aluminum Silicate 93763-70-3</td>
<td>-</td>
<td>TWA: 15 mg/m³ total dust TWA: 5 mg/m³ respirable fraction</td>
<td>TWA: 5 mg/m³ respirable dust TWA 10 mg/m³ total dust</td>
</tr>
<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>
<tr>
<td>Cellulose Fiber 9004-34-6</td>
<td>TWA 10 mg/m³</td>
<td>TWA: 15 mg/m³ total dust TWA: 5 mg/m³ respirable fraction (vacated) TWA: 5 mg/m³ (vacated) STEL 10 mg/m³</td>
<td>TWA: 1 mg/m³</td>
</tr>
</tbody>
</table>

Appropriate Engineering Controls

Engineering Measures: Showers Eyewash Stations Ventilation Systems- must be sufficient to keep vapor concentrations below the TWA limits shown above.

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: Wear gloves that are impervious to chemical penetration.

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: Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling. Avoid breathing vapors.
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>Thick paste-like mastic</td>
<td></td>
</tr>
<tr>
<td>Appearance</td>
<td>Black</td>
<td></td>
</tr>
<tr>
<td>Odor:</td>
<td>Solvent (Mineral Spirits)</td>
<td>No Information Available</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>154° C</td>
<td></td>
</tr>
<tr>
<td>Flash Point</td>
<td>40.5° C</td>
<td></td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>No data available</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>Flammable above 40.5° C</td>
</tr>
<tr>
<td>Upper flammability limit</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>Lower flammability limit</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Specific Density</td>
<td>1.06 @ 25° C</td>
<td>None known</td>
</tr>
<tr>
<td>Water Solubility</td>
<td>Insoluble</td>
<td></td>
</tr>
<tr>
<td>Solubility in other solvents</td>
<td>Yes, in aromatic and aliphatic solvents.</td>
<td></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>330° C</td>
<td></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>Explosive Properties</td>
<td>Vapor accumulation could flash or explode if ignited.</td>
<td></td>
</tr>
<tr>
<td>Oxidizing Properties</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>VOC Content</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: Avoid contact with strong oxidizing agents, flame, and sparks.


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: If swallowed, do not induce vomiting. Get medical attention immediately.

<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>&gt;5800 mg/m³ (Rat) 4 h</td>
</tr>
<tr>
<td>Cellulose Fiber</td>
<td>&gt;5 g/kg (Rat)</td>
<td>&gt;2 g/kg (Rabbit)</td>
<td></td>
</tr>
</tbody>
</table>

Symptoms Related to the Physical, Chemical, and Toxicological Characteristics

Symptoms: Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, fatigue, nausea, and vomiting.

Delayed and Immediate Effects and also Chronic Effects from Short and Long Term Exposure

Sensitization: May cause sensitization to susceptible persons.

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</td>
<td>Anticipated</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: Disposal of material and container should be in accordance with local, regional, national, and international regulations.
Contaminated Packaging: Do not re-use empty containers.

14. TRANSPORTATION INFORMATION

DOT: Regulated if shipped in containers >119 Gallons
Not regulated if shipped in containers <119 Gallons
Proper Shipping Name: Combustible liquid, n.o.s. (mineral spirits)
Hazard Class: 3
Packing Group: III

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: Yes
Chronic Health Hazard: Yes
Fire Hazard: Yes
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>
</tr>
</thead>
<tbody>
<tr>
<td>Asphalt</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Mineral Spirits</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Cellulose Fiber</td>
<td>X</td>
<td>X</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: 2</th>
<th>Flammability: 2</th>
<th>Instability: 0</th>
<th>Physical and Chemical Hazards- Physical Hazard: 0</th>
<th>Personal Protection: X</th>
</tr>
</thead>
<tbody>
<tr>
<td>HMIS</td>
<td>Health Hazard: 2</td>
<td>Flammability: 2</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Revision Date: 2-Sept-2015
Revision Note: Supersedes 29-May-2015

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.