1. Identification

Product identifier: PA-311M
Other means of identification: Not available.
Recommended use: Adhesive.
Recommended restrictions: None known.

Manufacturer/Importer/Supplier/Distributor information

Supplier: Siplast, Inc.
Division: Asphalt Roofing
Address: 1111 Highway 67 S
Arkadelphia, AR 71923
Website: www.siplast.com
E-Mail: ussds@siplast.com

2. Hazard(s) identification

Physical hazards: Flammable liquids
Category: 3

Health hazards: Not classified.

Environmental hazards: Not classified.

OSHA defined hazards: Not classified.

Label elements

Signal word: Warning
Hazard statement: Flammable liquid and vapor.
Response: In case of fire: Use CO2 for extinction.
Storage: Store in a well-ventilated place. Keep cool.
Disposal: Dispose of contents/container in accordance with local/regional/national/international regulations. See section 13 of this SDS for disposal instructions.

Hazard(s) not otherwise classified (HNOC): None known.

Supplemental information: None.

3. Composition/information on ingredients

Mixtures

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Common name and synonyms</th>
<th>CAS number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASPHALT</td>
<td></td>
<td>8052-42-4</td>
<td>40 - 60</td>
</tr>
<tr>
<td>STODDARD SOLVENT</td>
<td></td>
<td>8052-41-3</td>
<td>5 - 15</td>
</tr>
<tr>
<td>QUARTZ</td>
<td></td>
<td>14808-60-7</td>
<td>&lt; 5</td>
</tr>
</tbody>
</table>

Other components below reportable levels: 41.6381856
4. First-aid measures

Inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Oxygen or artificial respiration if needed. Do not use mouth-to-mouth method if victim inhaled the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Get medical attention if symptoms occur.

Skin contact: Wash off with soap and plenty of water. For minor skin contact, avoid spreading material on unaffected skin. If skin irritation occurs: Get medical advice/attention.

Eye contact: Immediately flush eyes with plenty of water for at least 15 minutes. If a contact lens is present, DO NOT delay irrigation or attempt to remove the lens. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

Ingestion: Rinse mouth thoroughly. Do not induce vomiting without advice from poison control center. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Do not use mouth-to-mouth method if victim ingested the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Aspiration may cause pulmonary edema and pneumonitis. If ingestion of a large amount does occur, call a poison control center immediately.

Most important symptoms/effects, acute and delayed: Not available.

Indication of immediate medical attention and special treatment needed: In case of shortness of breath, give oxygen. Symptoms may be delayed.

General information: IF exposed or concerned: Get medical advice/attention. Wash contaminated clothing before reuse.

5. Fire-fighting measures


Unsuitable extinguishing media: Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical: Firefighters may produce irritating, corrosive and/or toxic gases.

Special protective equipment and precautions for firefighters: Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA. Structural firefighters protective clothing will only provide limited protection.

Fire-fighting equipment/instructions: In case of fire and/or explosion do not breathe fumes. Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA. Move containers from fire area if you can do so without risk. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out. Some of these materials, if spilled, may evaporate leaving a flammable residue. Water runoff can cause environmental damage.

Specific methods: In the event of fire, cool tanks with water spray. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures: Remove sources of ignition. Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Do not touch or walk through spilled material.

Methods and materials for containment and cleaning up: Dike far ahead of spill for later disposal. Cover with DRY earth, DRY sand, or other non-combustible material followed with plastic sheet to minimize spreading or contact with rain. Collect spillage. Prevent product from entering drains.

Never return spills in original containers for re-use.

Environmental precautions: Prevent further leakage or spillage if safe to do so. Do not contaminate water.

7. Handling and storage

Precautions for safe handling: DO NOT handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. All equipment used when handling the product must be grounded. Do not breathe dust/fume/gas/mist/vapors/spray. Wear personal protective equipment. Do not use in areas without adequate ventilation. Avoid prolonged exposure. When using, do not eat, drink or smoke. Wash thoroughly after handling. Do not empty into drains.

Conditions for safe storage, including any incompatibilities: The pressure in sealed containers can increase under the influence of heat. Do not handle or store near an open flame, heat or other sources of ignition. This material can accumulate static charge which may cause spark and become an ignition source. Prevent electrostatic charge build-up by using common bonding and grounding techniques. Store in a well-ventilated place. Keep container tightly closed. Use care in handling/storage.
8. Exposure controls/personal protection

Occupational exposure limits

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>STODDARD SOLVENT (CAS 8052-41-3)</td>
<td>PEL</td>
<td>2900 mg/m³</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>500 ppm</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>QUARTZ (CAS 14808-60-7)</td>
<td>TWA</td>
<td>0.3 mg/m³</td>
<td>Total dust.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.1 mg/m³</td>
<td>Respirable.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2.4 mppcf</td>
<td>Respirable.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASPHALT (CAS 8052-42-4)</td>
<td>TWA</td>
<td>0.5 mg/m³</td>
<td>Inhalable fraction.</td>
</tr>
<tr>
<td>QUARTZ (CAS 14808-60-7)</td>
<td>TWA</td>
<td>0.025 mg/m³</td>
<td>Respirable fraction.</td>
</tr>
<tr>
<td>STODDARD SOLVENT (CAS 8052-41-3)</td>
<td>TWA</td>
<td>100 ppm</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASPHALT (CAS 8052-42-4)</td>
<td>Ceiling</td>
<td>5 mg/m³</td>
<td>Fume.</td>
</tr>
<tr>
<td>QUARTZ (CAS 14808-60-7)</td>
<td>TWA</td>
<td>0.05 mg/m³</td>
<td>Respirable dust.</td>
</tr>
<tr>
<td>STODDARD SOLVENT (CAS 8052-41-3)</td>
<td>Ceiling</td>
<td>1800 mg/m³</td>
<td></td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>350 mg/m³</td>
<td></td>
</tr>
</tbody>
</table>

Biological limit values: No biological exposure limits noted for the ingredient(s).

Individual protection measures, such as personal protective equipment

- **Eye/face protection**: Chemical goggles are recommended.
- **Hand protection**: Chemical resistant gloves are recommended. If contact with forearms is likely wear gauntlet style gloves.
- **Other**: Wear appropriate chemical resistant clothing. Chemical resistant gloves.

Skin protection

Respiratory protection: When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

Thermal hazards: Not available.

General hygiene considerations: When using do not smoke. When using, do not eat, drink or smoke. Avoid contact with eyes. Avoid contact with skin. Wash hands before breaks and immediately after handling the product. Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

**Appearance**

- **Physical state**: Liquid.
- **Form**: Liquid.
- **Color**: Not available.
- **Odor**: Not available.
- **Odor threshold**: Not available.
- **pH**: Not available.

**Melting point/freezing point**: Not available.

**Initial boiling point and boiling range**: 212 °F (100 °C)

**Flash point**: 100.0 - 140.0 °F (37.8 - 60.0 °C) Cleveland Open Cup

**Evaporation rate**: Not available.

**Flammability (solid, gas)**: Not available.
### Upper/lower flammability or explosive limits

<table>
<thead>
<tr>
<th></th>
<th>Not available.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flammability limit - lower (%)</td>
<td></td>
</tr>
<tr>
<td>Flammability limit - upper (%)</td>
<td></td>
</tr>
<tr>
<td>Explosive limit - lower (%)</td>
<td></td>
</tr>
<tr>
<td>Explosive limit - upper (%)</td>
<td></td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>Not available.</td>
</tr>
<tr>
<td>Vapor density</td>
<td>Not available.</td>
</tr>
<tr>
<td>Relative density</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

### Solubility(ies)

<table>
<thead>
<tr>
<th>Solubility (water)</th>
<th>Not available.</th>
</tr>
</thead>
</table>

### Partition coefficient

<table>
<thead>
<tr>
<th>(n-octanol/water)</th>
<th>Not available.</th>
</tr>
</thead>
</table>

### Auto-ignition temperature

Not available.

### Decomposition temperature

Not available.

### Viscosity

Not available.

### Other information

<table>
<thead>
<tr>
<th>Density</th>
<th>9.00 - 10.00 lb/gal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent volatile</td>
<td>20 - 30 %</td>
</tr>
<tr>
<td>Specific gravity</td>
<td>1.08 - 1.2</td>
</tr>
</tbody>
</table>

### 10. Stability and reactivity

<table>
<thead>
<tr>
<th>Reactivity</th>
<th>Not available.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemical stability</td>
<td>Stable under normal temperature conditions.</td>
</tr>
<tr>
<td>Possibility of hazardous reactions</td>
<td>Hazardous polymerization does not occur.</td>
</tr>
<tr>
<td>Conditions to avoid</td>
<td>Heat, flames and sparks.</td>
</tr>
<tr>
<td>Incompatible materials</td>
<td>Strong oxidizing agents.</td>
</tr>
<tr>
<td>Hazardous decomposition products</td>
<td>Irritants. Toxic gas.</td>
</tr>
</tbody>
</table>

### 11. Toxicological information

#### Information on likely routes of exposure

- **Ingestion**: May cause discomfort if swallowed. However, ingestion is not likely to be a primary route of occupational exposure.
- **Inhalation**: May cause irritation to the respiratory system. However, this product does not currently meet the criteria for classification.
- **Skin contact**: Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis
- **Eye contact**: Causes eye irritation.

#### Symptoms related to the physical, chemical and toxicological characteristics

Not available.

#### Information on toxicological effects

##### Acute toxicity

<table>
<thead>
<tr>
<th>Product</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>BH5330 (CAS Mixture)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Acute</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Oral</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>Mouse</td>
<td>25724.4473 mg/kg estimated</td>
</tr>
<tr>
<td></td>
<td>Rat</td>
<td>25765.8477 mg/kg estimated</td>
</tr>
<tr>
<td><strong>Other</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>Rat</td>
<td>20994.4746 mg/kg estimated</td>
</tr>
</tbody>
</table>

* Estimates for product may be based on additional component data not shown.
Skin corrosion/irritation  May cause defatting of the skin, but is neither an irritant nor a sensitizer.
Serious eye damage/eye irritation  Not classified. May be irritating to eyes.

Respiratory or skin sensitization

Respiratory sensitization  Not available.
Skin sensitization  Irritating to skin.
Germ cell mutagenicity  No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity  Risk of cancer cannot be excluded with prolonged exposure. This product contains crystalline silica. Silica is a known carcinogen; however in this encapsulated form the normal routes of exposure are unavailable.

IARC Monographs. Overall Evaluation of Carcinogenicity

<table>
<thead>
<tr>
<th>Substance</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASPHALT (CAS 8052-42-4)</td>
<td>2B Possibly carcinogenic to humans.</td>
</tr>
<tr>
<td>QUARTZ (CAS 14808-60-7)</td>
<td>1 Carcinogenic to humans.</td>
</tr>
<tr>
<td>STODDARD SOLVENT (CAS 8052-41-3)</td>
<td>3 Not classifiable as to carcinogenicity to humans.</td>
</tr>
</tbody>
</table>

US. National Toxicology Program (NTP) Report on Carcinogens

<table>
<thead>
<tr>
<th>Substance</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>QUARTZ (CAS 14808-60-7)</td>
<td>Known To Be Human Carcinogen.</td>
</tr>
</tbody>
</table>

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Reproductive toxicity  Based on available data, the classification criteria are not met.

Specific target organ toxicity
- single exposure  Not available.
- repeated exposure  Not available.

Aspiration hazard  Not classified.

Chronic effects  Not expected to be hazardous by OSHA criteria.

Further information  Symptoms may be delayed.

12. Ecological information

Ecotoxicity  Components of this product are hazardous to aquatic life. Accumulation in aquatic organisms is expected. Not expected to be harmful to aquatic organisms.

<table>
<thead>
<tr>
<th>Product</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>BH5330 (CAS Mixture)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fish</td>
<td>LC50</td>
<td>1148.3212 mg/l, 96 hours estimated</td>
</tr>
</tbody>
</table>

* Estimates for product may be based on additional component data not shown.

Persistence and degradability  Not available.

Bioaccumulative potential  Not available.

<table>
<thead>
<tr>
<th>Substance</th>
<th>Partition coefficient n-octanol / water (logKow)</th>
</tr>
</thead>
<tbody>
<tr>
<td>STODDARD SOLVENT</td>
<td>3.16 - 7.15</td>
</tr>
</tbody>
</table>

Mobility in soil  Not available.

Other adverse effects  Not available.

13. Disposal considerations

Disposal instructions  Contract with a disposal operator licensed by the Law on Disposal and Cleaning. Dispose of this material and its container to hazardous or special waste collection point. If discarded, this product is considered a RCRA ignitable waste, D001. Dispose of contents/container in accordance with local/regional/national/international regulations. Dispose in accordance with all applicable regulations.

Hazardous waste code  D001: Waste Flammable material with a flash point <140 F
Waste from residues / unused products  Dispose of in accordance with local regulations.
Contaminated packaging  Offer rinsed packaging material to local recycling facilities.

14. Transport information

DOT

<table>
<thead>
<tr>
<th>DOT Information</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>UN number</td>
<td>UN1999</td>
</tr>
<tr>
<td>UN proper shipping name</td>
<td>Tars, liquid</td>
</tr>
</tbody>
</table>
Transport hazard class(es)

Class: 3
Subsidiary risk: -
Packing group: III
Environmental hazards: No.
Marine pollutant: No.

Special precautions for user:
If shipped by ground in quantities LESS than 119 gallons (450 L): Not regulated as a hazardous material.
Special provisions: B1, B13, IB3, T1, TP3
Packaging exceptions: 150
Packaging non bulk: 203
Packaging bulk: 242

IATA

UN number: UN1999
UN proper shipping name: Tars, liquid

DOT

Material name: PA-311M
5553 Version #: 02 Issue date: 05-20-015
Further information

If shipped by ground in quantities LESS than 119 gallons (450 L): Not regulated as a hazardous material. If shipped by vessel in quantities less than 7.9 gallons (30 L), IMDG 2.3.2.5 exception applies: Not regulated as a hazardous material.

15. Regulatory information

US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard 29 CFR 1910.1200.

CERCLA/SARA Hazardous Substances - Not applicable.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

ASPHALT (CAS 8052-42-4) Listed.

US. OSHA Specifically Regulated Substances (29 CFR1910.1001-1050)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

Immediate Hazard - No
Delayed Hazard - No
Fire Hazard - Yes
Pressure Hazard - No
Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312

Hazardous chemical

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA)

Not regulated.

US state regulations

WARNING: This product contains a chemical known to the State of California to cause cancer.

US. Massachusetts RTK - Substance List

ASPHALT (CAS 8052-42-4)
QUARTZ (CAS 14808-60-7)
STODDARD SOLVENT (CAS 8052-41-3)

US. New Jersey Worker and Community Right-to-Know Act

Not regulated.

US. Pennsylvania RTK - Hazardous Substances

ASPHALT (CAS 8052-42-4)
QUARTZ (CAS 14808-60-7)
STODDARD SOLVENT (CAS 8052-41-3)

US. Rhode Island RTK

Not regulated.

US. California Proposition 65

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

ASPHALT (CAS 8052-42-4) Listed: January 1, 1990
QUARTZ (CAS 14808-60-7) Listed: October 1, 1988
### International Inventories

<table>
<thead>
<tr>
<th>Country(s) or region</th>
<th>Inventory name</th>
<th>On inventory (yes/no)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>Australian Inventory of Chemical Substances (AICS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Canada</td>
<td>Domestic Substances List (DSL)</td>
<td>Yes</td>
</tr>
<tr>
<td>Canada</td>
<td>Non-Domestic Substances List (NDSL)</td>
<td>No</td>
</tr>
<tr>
<td>China</td>
<td>Inventory of Existing Chemical Substances in China (IECSC)</td>
<td>Yes</td>
</tr>
<tr>
<td>Europe</td>
<td>European Inventory of Existing Commercial Chemical Substances (EINECS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Europe</td>
<td>European List of Notified Chemical Substances (ELINCS)</td>
<td>No</td>
</tr>
<tr>
<td>Japan</td>
<td>Inventory of Existing and New Chemical Substances (ENCS)</td>
<td>No</td>
</tr>
<tr>
<td>Korea</td>
<td>Existing Chemicals List (ECL)</td>
<td>Yes</td>
</tr>
<tr>
<td>New Zealand</td>
<td>New Zealand Inventory</td>
<td>Yes</td>
</tr>
<tr>
<td>Philippines</td>
<td>Philippine Inventory of Chemicals and Chemical Substances (PICCS)</td>
<td>Yes</td>
</tr>
<tr>
<td>United States &amp; Puerto Rico</td>
<td>Toxic Substances Control Act (TSCA) Inventory</td>
<td>Yes</td>
</tr>
</tbody>
</table>

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s).
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

### 16. Other information, including date of preparation or last revision

- **Issue date**: 05-20-2015
- **Version #**: 02
- **Further information**: HMIS® is a registered trade and service mark of the NPCA.
- **References**
  - ACGIH
  - EPA: AQUIRE database
  - NLM: Hazardous Substances Data Base
  - US. IARC Monographs on Occupational Exposures to Chemical Agents
  - HSDB® - Hazardous Substances Data Bank
  - IARC Monographs. Overall Evaluation of Carcinogenicity
  - National Toxicology Program (NTP) Report on Carcinogens
  - ACGIH Documentation of the Threshold Limit Values and Biological Exposure Indices

### 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.

### Revision Information

New email address