1. Identification

Product identifier PA-311
Other means of identification None.
Recommended use Adhesive.
Recommended restrictions None known.
Manufacturer/Importer/Supplier/Distributor information
Supplier
Supplier Siplast, Inc.
Division Asphalt Roofing
Address 1111 Highway 67 S
Arkadelphia, AR 71923
Website: www.siplast.com
E-Mail ussds@siplast.com
Hours of Operation 08:00 AM - 05:00 PM (US Central Standard Time)
Siplast General 1.800.922.8800
Assistance CHEMTREC 1.800.424.9300

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>30 - 50</td>
</tr>
<tr>
<td>SOLVENT NAPHTHA (PETROLEUM), LIGHT AROM.</td>
<td></td>
<td>64742-95-6</td>
<td>20 - 40</td>
</tr>
<tr>
<td>QUARTZ</td>
<td></td>
<td>14808-60-7</td>
<td>&lt; 1</td>
</tr>
</tbody>
</table>

Other components below reportable levels 29.6116504853
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.

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 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.

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. 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.

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

US. OSHA Table Z-3 (29 CFR 1910.1000)

<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>

US. ACGIH Threshold Limit Values

<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>
</tbody>
</table>

US. NIOSH: Pocket Guide to Chemical Hazards

<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>
</tbody>
</table>

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

Appropriate engineering controls
Provide adequate ventilation, including appropriate local extraction, to ensure that the defined occupational exposure limit is not exceeded.

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
Not available.

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 - 120.0 °F (37.8 - 48.9 °C) Cleveland Open Cup

Evaporation rate
Not available.

Flammability (solid, gas)
Not available.

Upper/lower flammability or explosive limits

Flammability limit - lower (%)
Not available.

Flammability limit - upper (%)
Not available.

Explosive limit - lower (%)
Not available.

Explosive limit - upper (%)
Not available.

Vapor pressure
Not available.

Vapor density
> 1 estimated
Relative density
Solubility(ies)
  Solubility (water)
Partition coefficient
(n-octanol/water)
Auto-ignition temperature
Decomposition temperature
Viscosity
Other information
  Density
  Percent volatile
  Specific gravity
10. Stability and reactivity
Reactivity
Chemical stability
Possibility of hazardous reactions
Conditions to avoid
Incompatible materials
Hazardous decomposition products
11. Toxicological information
Information on likely routes of exposure
  Ingestion
  Inhalation
  Skin contact
  Eye contact
Symptoms related to the physical, chemical and toxicological characteristics
Information on toxicological effects
Acute toxicity
Product	Species	Test Results
BHS5350 (CAS Mixture)
  Acute
    Oral
    LD50	Mouse	31635.791 mg/kg estimated
    Rat	31635.791 mg/kg estimated
  * Estimates for product may be based on additional component data not shown.

Skin corrosion/irritation
Serious eye damage/eye irritation
Respiratory or skin sensitization
  Respiratory sensitization
  Skin sensitization
Germ cell mutagenicity
Carcinogenicity
  IARC Monographs. Overall Evaluation of Carcinogenicity
  ASPHALT (CAS 8052-42-4)

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

Test Results

<table>
<thead>
<tr>
<th>Product</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>BHS5350 (CAS Mixture)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acute</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oral</td>
<td>Mouse</td>
<td>31635.791 mg/kg estimated</td>
</tr>
<tr>
<td>LD50</td>
<td>Rat</td>
<td>31635.791 mg/kg estimated</td>
</tr>
</tbody>
</table>

* Estimates for product may be based on additional component data not shown.
10. 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.

Persistence and degradability Not available.

Bioaccumulative potential Not available.

Mobility in soil Not available.

Other adverse effects Not available.

11. 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.

12. Transport information

DOT

UN number UN1999
UN proper shipping name Tars, liquid
Transport hazard class(es) Combustible Liquid
Class - Subsidiary risk 3
Label(s) III
Packing group - Environmental hazards No.
Marine pollutant - 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
Transport hazard class(es) Combustible Liquid
Class 3
Subsidiary risk - Packing group III
Environmental hazards No.
ERG Code 3L
Special precautions for user Not available.
Other information

| Passenger and cargo aircraft | Allowed. |
| Cargo aircraft only          | Allowed. |

**IMDG**

| UN number        | UN1999 |
| UN proper shipping name | Tars, liquid |
| Transport hazard class(es) | 3 |
| Class             | 3 |
| Subsidiary risk   | - |
| Packing group     | III |
| Environmental hazards | No. |
| Marine pollutant  | No. |
| EmS               | F-E, S-E |
| Special precautions for user | Not available. |
| Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code | Not available. |

**DOT**

![Combustible class 3]

**IATA; IMDG**

![Tars, liquid class 3]

**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.


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.
Material name: PA-311

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)

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)

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>No</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
This safety data sheet was prepared in accordance with the Safety Data Sheet for Chemica Products (JIS Z 7250:2005). Additional information is given in the Material Safety Data Sheet. The information in the sheet was written based on the best knowledge and experience currently available. 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