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

1.1. Product identifier

Product form : Mixture
Product name : Clippership Polymer Modified Asphalt Foundation Coating
Product code : LN-16

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

Use of the substance/mixture : Asphalt Foundation Coating

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)
Flam. Liq. 3  H226
Muta. 1B  H340
Carc. 1B  H350

2.2. Label elements

GHS-US labeling
Hazard pictograms (GHS-US) :

- GHS02
- GHS08

Signal word (GHS-US) : Danger
Hazard statements (GHS-US) :
- H226 - Flammable liquid and vapor
- H340 - May cause genetic defects
- H350 - May cause cancer

Precautionary statements (GHS-US) :
- P201 - Obtain special instructions before use
- P202 - Do not handle until all safety precautions have been read and understood
- P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking
- P233 - Keep container tightly closed
- P240 - Ground/bond container and receiving equipment
- P241 - Use explosion-proof equipment
- P242 - Use only non-sparking tools
- P243 - Take precautionary measures against static discharge
- P280 - Wear protective equipment
- P303+P361+P353 – If on skin (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
- P308+P313 - If exposed or concerned: Get medical advice/attention
- P403+P235 - Store in a well-ventilated place. Keep cool

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</th>
<th>%</th>
<th>Classification (GHS-US)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asphalt</td>
<td>(CAS No) 8052-42-4</td>
<td>57 – 65*</td>
<td>Carc. 2, H351</td>
</tr>
<tr>
<td>Solvent naphtha, petroleum, light aromatic</td>
<td>(CAS No) 64742-95-6</td>
<td>10 – 20*</td>
<td>Flam. Liq. 3, H226 Muta. 1B, H340 Carc. 1B, H350 Asp. Tox. 1, H304</td>
</tr>
</tbody>
</table>

**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).

**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**: May cause genetic defects. May cause cancer.

**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**

**Fire hazard**: Flammable liquid and vapor.

**Explosion hazard**: May form flammable/explosive vapor-air mixture.

**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**

**General measures**: Remove ignition sources. Use special care to avoid static electric charges. No open flames. No smoking.

**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

Additional hazards when processed: Handle empty containers with care because residual vapors are flammable.

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. No open flames. No smoking. Take precautionary measures against static discharge. Use only non-sparking tools. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Eliminate all ignition sources if safe to do so.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures: Proper grounding procedures to avoid static electricity should be followed. Ground/bond container and receiving equipment. Use explosion-proof equipment.

Storage conditions: Keep only in the original container in a cool, well ventilated place away from oxidizers, excessive heat, and open flame. Keep container tightly closed.

Incompatible products: Strong bases. Strong acids.

Incompatible materials: Sources of ignition. Direct sunlight. Heat sources.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

<table>
<thead>
<tr>
<th>Substance</th>
<th>USA ACGIH</th>
<th>ACGIH TWA (mg/m³)</th>
<th>USA OSHA</th>
<th>OSHA PEL (ppm)</th>
<th>OSHA STEL (ppm)</th>
<th>OSHA Ceiling (ppm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asphalt (8052-42-4)</td>
<td>ACGIH TWA (mg/m³)</td>
<td>0.5 mg/m³ Inhalable fraction</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hydrogen Sulfide (7783-06-4) may be released from this product</td>
<td>USA ACGIH</td>
<td>ACGIH TWA (ppm)</td>
<td>USA OSHA</td>
<td>OSHA PEL (ppm)</td>
<td>OSHA STEL (ppm)</td>
<td>OSHA Ceiling (ppm)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 ppm</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>USA ACGIH</td>
<td>ACGIH STEL (ppm)</td>
<td>USA OSHA</td>
<td>OSHA STEL (ppm)</td>
<td>(Vacated limits)</td>
<td>10 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5 ppm</td>
<td>USA OSHA</td>
<td>OSHA Ceiling (ppm)</td>
<td>(Vacated limits)</td>
<td>15 ppm</td>
</tr>
<tr>
<td></td>
<td>USA OSHA</td>
<td>OSHA Ceiling (ppm)</td>
<td></td>
<td></td>
<td></td>
<td>20 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 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. Wear appropriate mask.

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>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Liquid</td>
</tr>
<tr>
<td>Color</td>
<td>Black</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>No data available</td>
</tr>
</tbody>
</table>
Clippership Polymer Modified Asphalt Foundation Coating
LN-16
Safety Data Sheet
according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Relative evaporation rate (butyl acetate=1) : No data available
Melting point : No data available
Freezing point : No data available
Boiling point : 343.3 °C
Flash point : 43.33 °C
Auto-ignition temperature : No data available
Decomposition temperature : No data available
Flammability (solid, gas) : No data available
Vapor pressure : No data available
Relative vapor density at 20 °C : No data available
Relative density : No data available
Solubility : No data available
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
Flammable liquid and vapor. May form flammable/explosive vapor-air mixture.

10.3. Possibility of hazardous reactions
Not established.

10.4. Conditions to avoid

10.5. Incompatible materials
Strong acids. Strong bases.

10.6. Hazardous decomposition products
Carbon monoxide. Carbon dioxide. May release flammable gases.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

<table>
<thead>
<tr>
<th>Likely routes of exposure</th>
<th>Skin and eye contact; Inhalation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity</td>
<td>Not classified</td>
</tr>
</tbody>
</table>

Asphalt (8052-42-4)

<table>
<thead>
<tr>
<th>Test</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 oral rat</td>
<td>&gt; 5000 mg/kg</td>
</tr>
<tr>
<td>LD50 dermal rabbit</td>
<td>&gt; 2000 mg/kg</td>
</tr>
</tbody>
</table>

Solvent naphtha, petroleum, light aromatic (64742-95-6)

<table>
<thead>
<tr>
<th>Test</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 oral rat</td>
<td>2900 - 3200 mg/kg</td>
</tr>
<tr>
<td>LD50 dermal rabbit</td>
<td>&gt; 2000 mg/kg</td>
</tr>
<tr>
<td>LC50 inhalation rat (ppm)</td>
<td>3400 ppm/4h</td>
</tr>
<tr>
<td>Skin corrosion/irritation</td>
<td>Not classified</td>
</tr>
<tr>
<td>Serious eye damage/irritation</td>
<td>Not classified</td>
</tr>
<tr>
<td>Respiratory or skin sensitization</td>
<td>Not classified</td>
</tr>
</tbody>
</table>
Clippership Polymer Modified Asphalt Foundation Coating
LN-16
Safety Data Sheet
according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Germ cell mutagenicity: May cause genetic defects.
Carcinogenicity: May cause cancer.

<table>
<thead>
<tr>
<th>Asphalt (8052-42-4)</th>
<th>IARC group</th>
<th>2B - Possibly carcinogenic to humans</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Toxicity Program (NTP) Status</td>
<td>5 - Twelfth Report - Items under consideration</td>
<td></td>
</tr>
</tbody>
</table>

Reproductive toxicity: Not classified
Specific target organ toxicity (single exposure): Not classified
Specific target organ toxicity (repeated exposure): Not classified
Aspiration hazard: Not classified
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.

SECTION 12: Ecological information

12.1. Toxicity

Solvent naphtha, petroleum, light aromatic (64742-95-6)
LC50 fish 1 9.22 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss)
EC50 Daphnia 1 6.14 mg/l (Exposure time: 48 h - Species: Daphnia magna)

12.2. Persistence and degradability

Clippership Polymer Modified Asphalt Foundation Coating LN-16
Persistence and degradability: Not established.

Asphalt (8052-42-4)
Persistence and degradability: Not established.

12.3. Bioaccumulative potential

Clippership Polymer Modified Asphalt Foundation Coating LN-16
Bioaccumulative potential: Not established.

Asphalt (8052-42-4)
BCF fish 1 (no bioaccumulation expected)
Log Pow > 6
Bioaccumulative potential: Not established.

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Other information: Avoid release to the environment.

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.
Additional information: Handle empty containers with care because residual vapors are flammable.
Ecology - waste materials: Avoid release to the environment.

SECTION 14: Transport information

Department of Transportation (DOT)
In accordance with DOT
Not regulated for transport in non-bulk containers
If bulk containers:
Transport document description: UN1999 Tars, liquid, 3, III
Clippership Polymer Modified Asphalt Foundation Coating

LN-16

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

| UN-No.(DOT) | : | UN1999 |
| Proper Shipping Name (DOT) | : | Tars, liquid |
| Class (DOT) | : | 3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120 |
| Packing group (DOT) | : | III - Minor Danger |
| Hazard labels (DOT) | : | 3 - Flammable liquid |

DOT Packaging Non Bulk (49 CFR 173.xxx) : 203
DOT Packaging Bulk (49 CFR 173.xxx) : 242

DOT Special Provisions (49 CFR 172.102) : B1 - If the material has a flash point at or above 38 C (100 F) and below 93 C (200 F), then the bulk packaging requirements of 173.241 of this subchapter are applicable. If the material has a flash point of less than 38 C (100 F), then the bulk packaging requirements of 173.242 of this subchapter are applicable.

B13 - A non-specification cargo tank motor vehicle authorized in 173.247 of this subchapter must be at least equivalent in design and in construction to a DOT 406 cargo tank or MC 306 cargo tank (if constructed before August 31, 1995), except as follows: a. Packaging equivalent to MC 306 cargo tanks are excepted from the certification, venting, and emergency flow requirements of the MC 306 specification. b. Packaging equivalent to DOT 406 cargo tanks are excepted from 178.3457(d)(5), circumferential reinforcements; 178.34510, pressure relief; 178.34511, outlets; 178.34514, marking, and 178.34515, certification. c. Packaging are excepted from the design stress limits at elevated temperatures, as described in Section VIII of the ASME Code (IBR, see 171.7 of this subchapter). However, the design stress limits may not exceed 25 percent of the stress for 0 temper at the maximum design temperature of the cargo tank, as specified in the Aluminum Association's Aluminum Standards and Data (IBR, see 171.7 of this subchapter).

IB3 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1 and 31HA2, 31HB2, 31HN2, 31HD2 and 31HH2). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized, except for UN2672 (also see Special Provision IP8 in Table 2 for UN2672).

TP3 - The maximum degree of filling (in %) for solids transported above their melting points and for elevated temperature liquids shall be determined by the following: Degree of filling = 95 \* df / df Where: df and dr are the mean densities of the liquid at the mean temperature of the liquid during filling and the maximum mean bulk temperature during transport respectively.

DOT Packaging Exceptions (49 CFR 173.xxx) : 150
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27) : 60 L
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75) : 220 L
DOT Vessel Stowage Location : A - The material may be stowed “on deck” or “under deck” on a cargo vessel and on a passenger vessel.

Emergency Response Guide (ERG) Number : 130
Other information : No supplementary information available.

Transport by sea

Regulated in bulk and non-bulk containers

Transport document description (IMDG) : UN 1999 TARS, LIQUID, 3, III
UN-No. (IMDG) : 1999
Proper Shipping Name (IMDG) : TARS, LIQUID
Class (IMDG) : 3 - Flammable liquids
Packing group (IMDG) : III - substances presenting low danger
Limited quantities (IMDG) : 5 L
Clippership Polymer Modified Asphalt Foundation Coating
LN-16
Safety Data Sheet
according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Air transport
Regulated in bulk and non-bulk containers
Transport document description (IATA) : UN 1999 TARS, LIQUID, 3, III
UN-No.(IATA) : 1999
Proper Shipping Name (IATA) : TARS, LIQUID
Class (IATA) : 3 - Flammable Liquids
Packing group (IATA) : III - Minor Danger

SECTION 15: Regulatory information
15.1. US Federal regulations
Clippership Polymer Modified Asphalt Foundation Coating LN-16
SARA Section 311/312 Hazard Classes
Immediate (acute) health hazard
Delayed (chronic) health hazard
Fire hazard

Asphalt (8052-42-4)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

Solvent naphtha, petroleum, light aromatic (64742-95-6)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. International regulations
CANADA
Asphalt (8052-42-4)
Listed on the Canadian DSL (Domestic Substances List)

Solvent naphtha, petroleum, light aromatic (64742-95-6)
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)

Solvent naphtha, petroleum, light aromatic (64742-95-6)
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 IECSC (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)
Clippership Polymer Modified Asphalt Foundation Coating
LN-16
Safety Data Sheet
according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Solvent naphtha, petroleum, light aromatic (64742-95-6)
Listed on the AICS (Australian Inventory of Chemical Substances)
Listed on IECSC (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 can expose you to chemicals including asphalt, which is known to the State of California to cause cancer. For more information, go to www.P65Warnings.ca.gov.

SECTION 16: Other information

Other information: None.

Full text of H-phrases:

<table>
<thead>
<tr>
<th>H-phrase</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asp. Tox. 1</td>
<td>Aspiration hazard Category 1</td>
</tr>
<tr>
<td>Carc. 1B</td>
<td>Carcinogenicity Category 1B</td>
</tr>
<tr>
<td>Carc. 2</td>
<td>Carcinogenicity Category 2</td>
</tr>
<tr>
<td>Flam. Liq. 3</td>
<td>Flammable liquids Category 3</td>
</tr>
<tr>
<td>Muta. 1B</td>
<td>Germ cell mutagenicity Category 1B</td>
</tr>
<tr>
<td>H226</td>
<td>Flammable liquid and vapor</td>
</tr>
<tr>
<td>H304</td>
<td>May be fatal if swallowed and enters airways</td>
</tr>
<tr>
<td>H340</td>
<td>May cause genetic defects</td>
</tr>
<tr>
<td>H350</td>
<td>May cause cancer</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.