Section 1. Identification

Trade Name: Asphalt Rubber Blend
Identified Uses: Industrial coating
Effective Date: 5/23/2015
Supercedes Date: 11/27/2013
Supplier/Manufacturer: The D.S. Brown Company
300 East Cherry Street
North Baltimore, Ohio 45872
In Case of Emergency: Chemtrec 1-800-262-8200 International 01-703-741-5500

Section 2. Hazards Identification

Appearance and Odor: Brown-black liquid with faint petroleum odor.

Emergency Overview: DANGER! Hot molten material can cause skin burns.
When heated, this material may vent toxic levels of hydrogen sulfide (H2S) vapors that accumulate in the vapor spaces of storage and transport compartments. H2S vapors can cause eye, skin and respiratory tract irritation and asphyxiation.

Potential Health Effects: Inhalation: Vapors and fumes from hot material can be unpleasant and may cause nausea, headache and respiratory irritation. Hydrogen sulfide (H2S) gas can be present in the vapor space of storage tanks and bulk transport compartments (see Sections 7, 8, & 11).
Skin Contact: Hot product causes severe burns. Contact with unheated material may cause mild skin irritation.
Eye Contact: Hot product causes severe burns. Vapors and fumes from hot material may cause eye irritation.
Ingestion: Hot product causes severe burns. Ingestion of unheated material may cause irritation.
R36/37/38: Irritating to eyes, respiratory system and skin.
S36/39: Wear suitable protective clothing and eye/face protection.

Hazard Pictograms:

Signal Word: Danger
Section 3. Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS No.</th>
<th>Weight %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asphalt</td>
<td>8052-42-4</td>
<td>80-100</td>
</tr>
<tr>
<td>Gilsonite</td>
<td>12002-43-6</td>
<td>0-20</td>
</tr>
<tr>
<td>Rubber</td>
<td>9003-55-8</td>
<td>0-20</td>
</tr>
<tr>
<td>Limestone</td>
<td>1317-65-3</td>
<td>0-15</td>
</tr>
<tr>
<td>Petroleum Hydrocarbon</td>
<td>64742-52-5</td>
<td>0-20</td>
</tr>
</tbody>
</table>

Section 4. First Aid Measures

Inhalation: If there are signs or symptoms as described in this SDS due to breathing this material, move the person to fresh air. If breathing has stopped, apply artificial respiration and get medical attention.

Skin Contact: If the hot material gets on skin, quickly cool in water. Get medical attention for extensive burns. DO NOT try to peel the solidified material from the skin or use solvents or thinners to dissolve it. The use of vegetable oil or mineral oil is recommended for removal of this material from the skin.

Eye Contact: If the hot material should splash into the eyes, flush eyes immediately with plenty of water while holding the eyelids open. Seek medical attention.

Ingestion: Since this material is not expected to be an ingestion problem, no first aid procedures are required.

Section 5. Fire-Fighting Measures

Flammability of the Product: May ignite and burn at temperatures exceeding the flash point.

Flash Point (C.O.C.): 550°F (287°C) minimum.

Dust Explosivity Limits: Not applicable.

Extinguishing Media: Carbon dioxide (CO2), dry chemical, foam or water spray (fog).

Firefighting Procedures: Avoid using straight water streams. Water spray and foam must be applied carefully to avoid frothing and from as far a distance as possible. Avoid excessive water spray application. Minimize breathing vapors, gases or fumes of decomposition products. Use supplied-air breathing equipment for enclosed or confined spaces.

Unusual Fire Hazards: When heated above flash point, material will release flammable vapors, which can burn or be explosive in confined spaces if ignited. Vapor or gas may spread to distant ignition sources (pilot lights, weld- ing equipment, electrical equipment, etc.) and flash back. Vapors may accumulate in low areas. Do not mix with strong oxidants such as liquid chlorine or concentrated oxygen.
Section 6. Accidental Release Measures

Steps to be Taken in Case Material is Released or Spilled:
- Take proper precautions to ensure your own health and safety before attempting spill control or cleanup. Do not touch or walk through spilled material. Shut off leaks if possible without personal risks.
- Eliminate sources of ignition. Add sand, earth or other suitable absorbent to spill area. If hot, allow to cool. Transfer to suitable containers. Avoid sparks or hot metal surfaces.
- Keep product out of sewers and waterways by diking or impounding. Advise authorities if product has entered or may enter sewers or waterways. Assure conformity with applicable governmental regulations.

Section 7. Handling and Storage

Handling:
- Toxic quantities of hydrogen sulfide (H2S) may present in storage tanks and bulk transport vessels that contain or have contained this material. Persons opening or entering these compartments should first determine if H2S is present. See Protective Equipment section. DO NOT ATTEMPT RESCUE WITHOUT WEARING APPROVED SUPPLIED-AIR OR self-contained breathing equipment.
- Use with adequate ventilation. Avoid open flames. Mini- mize breathing vapor, mist and fumes. Avoid prolonged and repeated contact with skin. Adhere to good hygienic practices. Prevent contact with food and tobacco products. Do NOT take internally. Never siphon by mouth.
- Heath Studies have shown that many petroleum hydrocarbons pose potential health risks that vary from person to person. As a precaution, exposure to liquids, vapors, mists or fumes should be minimized. Use with adequate ventilation. Avoid prolonged and repeated contact with skin. Adhere to good hygienic practices. Avoid open flames.

Storage:
- Store in a cool, dry place, out of the sun and away from heat, sparks and open flame.
- Do not over heat. Prolonged overheating may cause damage to the rubber, rendering the product useless.

Section 8. Exposure Controls/Personal Protection

Engineering Controls:
- Provide ventilation or other engineering controls to keep the airborne concentrations of vapor or mists below the exposure limits indicated below. An emergency eye wash station and safety shower should be located near the workstation.

Exposure Guidelines:

<table>
<thead>
<tr>
<th>Hazardous Components</th>
<th>CAS No.</th>
<th>OSHA PEL</th>
<th>ACGIH TLV-TWA</th>
<th>NIOSH REL Ceiling</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asphalt</td>
<td>8052-42-4</td>
<td>N/E</td>
<td>*0.5 mg/m³</td>
<td>*5 mg/m³</td>
</tr>
<tr>
<td>Petroleum Hydrocarbon</td>
<td>64742-52-5</td>
<td>5 ppm</td>
<td>5 ppm</td>
<td>N/E</td>
</tr>
</tbody>
</table>

* = Exposure guidelines for fumes from heating
N/E = Not established.
## Section 8. Exposure Controls/Personal Protection  cont’d.

| Exposure Guidelines cont’d. | OSHA = Occupation Safety and Health Administration.  
|                            | ACGIH = American Conference of Governmental Industrial Hygienists.  
|                            | NIOSH = National Institute for Occupational Safety and Health.  
|                            | PEL = Permissible Exposure Limits.  
|                            | TLV = Threshold Limit Value.  
|                            | TWA = Time Weighted Average.  
|                            | REL = Recommended Exposure Limits.  
| Respiratory Protection | Use supplied-air respirator in confined areas or when vapors exceed TLV limits.  
| Ventilation | Local Exhaust: In enclosed areas.  
|             | Special: None  
|             | Mechanical: In enclosed areas.  
|             | Other: None  
| Eye Protection | Safety glasses or face shield for hot material.  
| Protective Gloves | Insulated for hot material.  
| Other Protective Clothing | Long sleeves and impervious clothing to protect against splashed hot material.  
| Equipment |  
| Work/Hygienic Practices | See Section 7.

## Section 9. Physical and Chemical Properties

- **Appearance and Odor**: Black solid, cold. Asphalt odor.
- **Vapor Pressure (mm Hg.) @ 20°C**: <0.1
- **Boiling Point °F IBP Approx.**: 900°
- **Melting Point °F (Ring & Ball)**: 100-250°
- **Solubility in Water**: Negligible
- **Specific Gravity (H20 = 1)**: 1.0-1.15
- **Evaporation Rate (Butyl Acetate = 1) @ 77°F**: <0.01
- **Vapor Density (Air = 1)**: >5
- **Flash Point (C.O.C.)**: 550°F min.
- **Physical Properties/Additional Information**: No additional information available.
Section 10. Stability and Reactivity

Stability : Stable  
Conditions to Avoid : Do not overheat. Auto-ignition may occur if heated beyond 600°F.  
Incompatible Materials : This product may react with strong oxidizing agents.  
Hazardous Decomposition or By-products : Combustion: carbon dioxide (CO2), carbon monoxide (CO), sulfur oxides (SOx), hydrogen sulfide (H2S), smoke, fumes.  
Hazardous Polymerization : Will not occur.

Section 11. Toxicological Information

Toxicity : The cool solid material is not expected to cause eye and skin irritation, nor is it expected to have acute systemic toxicity by ingestion.  
Asphalt fumes have been associated with irritation of eyes, nose and throat.  
Some asphalts contain sulfur compounds, which may form hydrogen sulfide (H2S) when heated. The rotten eggs odor of H2S is unreliable as an indicator of concentration because it may be entirely masked by the odor of the asphalt. Signs and symptoms of overexposure to H2S include: respiratory tract irritation, headaches, dizziness, nausea, gastrointestinal disturbance, coughing, a sensation of dryness and pain in the nose, throat and chest, confusion and unconsciousness. H2S concentrations of 700-1000 ppm can be extremely hazardous or fatal.  

Carcinogenicity : NTP: No  
IARC Monograph : See below.  
OSHA Regulated : No  
Additional Health Data : No association has been established between industrial exposure to petroleum asphalt and cancer in humans. The International Agency for Research on Cancer (IARC) has recently reviewed the carcinogenic potential of asphalts. They concluded that there was insufficient evidence that undiluted, air-refined asphalt was carcinogenic to animals, while there was only limited evidence that steam-refined asphalts were carcinogenic to animals. Additionally, there was insufficient evidence to conclude that asphalts were carcinogenic to human beings. Studies in which mice were exposed to a variety of whole asphalts did not result in any increased cancer rate; mice exposed to asphalts diluted with hydrocarbon solvents had increased incidence of certain types of cancer. Brief or intermittent skin contact with this asphalt product is not expected to produce any serious effects. While normal handling of this product is not likely to cause cancer in humans, skin contact and breathing of mists, fumes or vapors should be reduced to a minimum. We strongly recommend that the precautions outlined in this MSDS be followed when handling this material.
Section 12. Ecological Information

EPA Hazard Classification

- Acute Hazard: -
- Fire Hazard: -
- Reactive Hazard: -
- Not Applicable: X
- Chronic Hazard: -
- Pressure Hazard: -

Ecotoxicity Effects: Product can foul shoreline and damage plant life. This product is not expected to cause any acute or chronic toxicity to aquatic organisms due to its extremely low water solubility.

Section 13. Disposal Considerations

Disposal Method: This material as supplied and by itself, when discarded or disposed of, is not an EPA RCRA hazardous waste according to federal regulations. Dispose of in accordance with local, state and federal regulations.

Section 14. Transport Information

Transport Information: The description shown may not apply to all shipping situations. Consult 49 CFR, or appropriate regulations, for additional description requirements.

Solid: Non-Hazardous, Non-regulated.

Hot Liquid: DOT Shipping Name: Asphalt
- DOT Label Information: Elevated temperature material, liquid, n.o.s. (asphalt).
- DOT Hazard Class: 9 (Miscellaneous).
- DOT ID Number: NA 3257.
- DOT Packing Group: III

Section 15. Regulatory Information

SARA TITLE III: EPA Regulation 40 CFR 302 (CER-CLA Section 102);
- CFR 355 (SARA Section 301-304);
- CFR 372 (SARA Section 313) – NOT APPLICABLE.


TOSCA, CANADIAN DSL: All components of this product are on the TOSCA and DSL inventories.
Section 16. Other Information

NFPA 704 Rating
: Health = 1
: Flammability = 1
: Instability = 0

HMIS III Rating
: Health = 1
: Flammability = 1
: Physical Hazard = 0

Revision Statement
: This Safety Data Sheet has been revised to include new trade names.

Supersedes
: November 23, 2009

This 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. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist. The information has been completed to the best of our knowledge and is believed to be accurate and reliable as from the date indicated. However, no warranty is made as to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability and completeness of such information for his own particular use.

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