MATERIAL SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: Heavy Duty Asphalt Emulsion
Item Number: 5001 Date: December 3, 2002
Chemical Name: Asphalt, filler, and water mixture
Comparable Products: 5004 Heavy Duty Fibered Asphalt Emulsion, 5006 Trowel Grade Asphalt Emulsion
Company Information: The Brewer Company
30060 Lakeland Blvd.
Wickliffe, OH 44092

Emergency Phone: CHEMTREC 800-424-9300 24 HOURS
General Information 800-394-0086

2. COMPOSITION/ INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS NO.</th>
<th>% by Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Petroleum asphalt</td>
<td>8052-42-4</td>
<td>45 ± 5</td>
</tr>
<tr>
<td>Fillers &amp; fibers</td>
<td>mixture</td>
<td>10 ± 5</td>
</tr>
<tr>
<td>Potassium bi-chromate</td>
<td>7778-50-9</td>
<td>0.1 ± 0.05</td>
</tr>
<tr>
<td>Water</td>
<td>7731-18-5</td>
<td>50 ± 5</td>
</tr>
</tbody>
</table>

Note: The above components and their percentages are provided for health and safety purposes, ONLY. This document should not be construed as a guaranteed analysis of any specific lot or as specifications for the product.

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW:
Appearance and odor: Dark brown, thick compound with a slight hydrocarbon odor
WARNING STATEMENTS: Harmful if swallowed. May cause eye and skin irritation.

POTENTIAL HEALTH EFFECTS:
Likely Routes of Exposure:
EYE CONTACT: Conjunctivitis, irritation, tearing.
SKIN CONTACT: Irritation or inflammation. Allergic skin reactions may occur.
INHALATION: Not expected to be an inhalation hazard.
INGESTION: Considered unlikely.

Refer to Section 11 for toxicological information.

4. FIRST AID MEASURES

IF IN EYES: immediately flush with large amounts of potable water. Eye lids should be held away the eyeball to ensure thorough rinsing. Get medical attention if irritation persists.
IF ON SKIN: Remove clothing and wash with soap and water.
IF INHALED: Not expected to be an inhalation hazard
IF INGESTED: Do not induce vomiting – aspiration hazard. If spontaneous vomiting occurs, monitor for breathing difficulty. Get immediate medical attention.
5. FIRE FIGHTING MEASURES

FLASH POINT: Water-based, not applicable. Will not burn until cured.

HAZARDOUS PRODUCTS OF COMBUSTIONS: H₂S, CO, CO₂ and SOX

EXTINGUISHING MEDIA: Foam CO₂ or dry chemical extinguishers

UNUSUAL FIRE AND EXPLOSION HAZARDS: Stable. Water may cause frothing

6. ACCIDENTAL RELEASE MEASURES

If your facility or operation has an “oil or hazardous substance contingency plan”, activate the procedure. Take immediate steps to stop and contain the spill.

Shut off all sources of ignition.
- Keep people away.
- Recover free product, add limestone, earth, or other suitable absorbents.
- Minimize skin contact and avoid breathing vapors.
- Ventilate confined spaces.
- Keep product out of sewers and waterways by diking or impounding.
- Advise authorities if product has entered sewers, waterways or extensive land areas.
- Assure conformity with all applicable government regulations.
- Dispose of in an approved facility, see Section 13, Disposal Considerations.

7. HANDLING AND STORAGE

HANDLING: Where protective clothing, gloves and OSHA approved eye protection. When not in use, securely replace lid on open containers

STORAGE: Store in a cool dry, away from heat and corrosion sources.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

EYE PROTECTION: OSHA approved glasses, goggles or full face shield. Have eye baths readily available. Do not wear contact lenses.

SKIN PROTECTION: Wear impervious gloves and clothing to prevent skin contact.

RESPIRATORY PROTECTION: Not applicable

VENTILATION: Maintain positive flow of fresh air.

AIRBORNE EXPOSURE LIMITS: OSHA PEL ACGIH TLV

Petroleum asphalt No STEL recommended 5 mg/m³

Note: All pigments, fillers, fibers and extenders in this product are totally encapsulated and do not pose a respirable dust hazard during installation and use of this product.

Components referred to herein, may be regulated by specific Canadian provincial legislation. Please refer to exposure limits legislated for the province in which the substance will be use.

9. PHYSICAL AND CHEMICAL PROPERTIES

CHEMICAL FORMULA: Not applicable, mixture

APPEARANCE: Dark brown, thick consistency

ODOR: Very mild hydrocarbon odor

pH: Approximately 6.0 – 8.0

MELTING POINT (°F): Not applicable

DENSITY (lb./gal): Greater than 8.4

SOLUBILITY IN WATER: Insoluble but miscible with water

NOTE: These physical data are typical values based on material testing, but may vary from sample to sample. Typical values should not be construed as a guaranteed analysis of any specific lot or as specifications for the product.
10. STABILITY AND REACTIVITY

STABILITY: Stable.
MATERIALS TO AVOID: Strong oxidizers
HAZARDOUS DECOMPOSITION PRODUCTS: H₂S, CO, CO₂ and SOX
HAZARDOUS POLYMERIZATION: None

11. TOXICOLOGICAL INFORMATION

Oral – rat LD50 (mg/kg): No data available
Dermal – rabbit LD50 (mg/kg): No data available
Eye Irritation – rabbit: No data available
Skin Irritation – rabbit (24-hr exposure): No data available

12. ECOLOGICAL INFORMATION

This product may cause adverse environmental effects if used improperly or release to the environment through a spill. Employ best management practices to prevent this material from entering storm sewer systems, waterways or otherwise impacting plant and animal species.

13. DISPOSAL CONSIDERATIONS

This product, when discarded or disposed or, is not specifically listed as a hazardous waste in federal regulations. It could be designated as a hazardous waste according to state regulations. This product could also become a hazardous waste if it is mixed with or comes in contact with a hazardous waste. If such contact occurs, consult 40 CFR, to determine whether it is a hazardous waste.

The transportation, storage, treatment and dispose of this waste must be conducted in accordance with all applicable federal, state and local regulations.

14. TRANSPORT INFORMATION

The data provided in this section is for information only. Please apply the appropriate regulations to properly classify your shipment for transportation.

US DOT: Not classified as a hazardous material under HM-181
CANADIAN TDG: Not determined

15. REGULATORY INFORMATION

TSCA INVENTORY: Not determined
DSL INVENTORY: Not determined
WHMIS CLASSIFICATION: Not determined

SARA HAZARD NOTIFICATION:
- Hazardous Categories Under Title III Rules (40 CFR 370): Not applicable
- Section 302 Extremely Hazardous Substances: Not applicable
- Section 313 Toxic Chemical(s): Not applicable
1. CA Proposition 65 Warning: This product may contain chemicals known to the State of California to cause cancer, birth defects, and/or other reproductive harm. Refer to Section 11 for OSHA/HPA Hazardous Chemical(s) and Section 13 for RCRA classification.

16. OTHER INFORMATION

This material has been defined as a hazardous chemical under the criteria of the OSHA Hazard Communication Standard (29 CFR 1910.1200).

<table>
<thead>
<tr>
<th>Health</th>
<th>Fire</th>
<th>Reactivity</th>
<th>Additional Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suggested NFPA(^1) Rating</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Suggested HMIS(^1) Rating</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Reason for revision: Updated format

Supersedes MSDS Dated: November 12, 2002

The information and recommendations contained herein are to the best of THE BREWER COMPANY’S knowledge and belief, accurate and reliable as of the date issued. THE BREWER COMPANY does not warrant or guarantee their accuracy or reliability, and THE BREWER COMPANY shall not be liable for any loss or damage arising out of the use thereof.

The information and recommendations are offered for the users consideration and examination, and it is the user's responsibility to satisfy itself that they are suitable and complete for its particular use. It is also the users responsibility to make certain that it is relying upon the most recent, updated, information and recommendations available from THE BREWER COMPANY.

The Environmental Information included, as well as the Hazardous Material Identification System (HMIS) and National Fire Protection Association (NFPA) ratings, have been included by THE BREWER COMPANY in order to provide additional health and hazard classification information. The ratings recommended are based upon the criteria supplied by the developers of these rating systems, together with THE BREWER COMPANY’S interpretation of the available data.

For Other Product Information Contact:

THE BREWER COMPANY
30060 Lakeland Blvd.
Wickliffe, OH 44092

TELEPHONE: 440/944-3800
FAX: 440/944-1492