Brewer Cote Mastic Patch
Safety Data Sheet
according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations
Date of issue: 04/28/2015       Version: 1.01

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

1.1. Product identifier
Product form : Mixture
Trade name : Brewer Cote Mastic Patch
Product code : 13210

1.2. Relevant identified uses of the substance or mixture and uses advised against
Use of the substance/mixture : Cold Applied Asphalt Pavement Patching Material

1.3. Details of the supplier of the safety data sheet
The Brewer Company
1354 US Hwy 50
Milford, OH 45150
T General 800-394-0017 - F 513-576-1414
www.thebrewerco.com

1.4. Emergency telephone number
Emergency number : 800-424-9300 CHEMTREC 24 HOURS

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture
GHS-US classification
Carc. 1A H350
STOT RE 1 H372
Full text of H-phrases: see section 16

2.2. Label elements
GHS-US labelling
Hazard pictograms (GHS-US)

Signal word (GHS-US) : Danger
Hazard statements (GHS-US) : H350 - May cause cancer
: H372 - Causes damage to organs through prolonged or repeated exposure
Precautionary statements (GHS-US) : P201 - Obtain special instructions before use
: P202 - Do not handle until all safety precautions have been read and understood
: P260 - Do not breathe spray, vapours
: P264 - Wash hands, forearms and face thoroughly after handling
: P270 - Do not eat, drink or smoke when using this product
: P280 - Wear eye protection, protective clothing, protective gloves
: P308+P313 - If exposed or concerned: Get medical advice/attention
: P314 - Get medical advice/attention if you feel unwell
: P405 - Store locked up
: P501 - Dispose of contents/container to in accordance with local, regional, and national regulations.

2.3. Other hazards
No additional information available

2.4. Unknown acute toxicity (GHS-US)
Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substance
Not applicable

3.2. Mixture
Brewer Cote Mastic Patch
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<table>
<thead>
<tr>
<th>Name</th>
<th>Product Identifier</th>
<th>%</th>
<th>GHS-US classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>silica</td>
<td>(CAS No) 14808-60-7</td>
<td>25.6</td>
<td>21.6452 - 32.269512</td>
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<tr>
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<td></td>
<td></td>
<td>Carc. 1A, H350 STOT RE 1, H372</td>
</tr>
<tr>
<td>asphalitic bitumen, not cut back</td>
<td>(CAS No) 8052-42-4</td>
<td>7.459</td>
<td>9.54</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Carc. 2, H351</td>
</tr>
<tr>
<td>thickening clay</td>
<td>(CAS No) 12174-11-7</td>
<td>2.115</td>
<td>2.565</td>
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<td></td>
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<td>Carc. 2, H351</td>
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<tr>
<td>carbon black</td>
<td>(CAS No) 1333-86-4</td>
<td>0.22244</td>
<td>0.3188364</td>
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<td></td>
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<td>Carc. 2, H351</td>
</tr>
<tr>
<td>titanium (IV) oxide</td>
<td>(CAS No) 13463-67-7</td>
<td>0.02</td>
<td>&lt; 0.1820104</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Carc. 2, H351</td>
</tr>
</tbody>
</table>

Full text of H-phrases: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general
IF exposed or concerned: Get medical advice/attention. Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

First-aid measures after inhalation
Not expected to be an inhalation hazard. Remove person to fresh air and keep comfortable for breathing.

First-aid measures after skin contact
Wash skin with plenty of water. Take off contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention. Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.

First-aid measures after eye contact
Rinse eyes with water as a precaution. Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persist.

First-aid measures after ingestion
Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/physician. Rinse mouth. Obtain emergency medical attention.

4.2. Most important symptoms and effects, both acute and delayed
No additional information available

4.3. Indication of any immediate medical attention and special treatment needed
No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media
Suitable extinguishing media

Unsuitable extinguishing media
Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture
Fire hazard
Not flammable in liquid state.

Explosion hazard
Product is not explosive.

Reactivity
Product is stable.

5.3. Advice for firefighters
Firefighting instructions
Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.

Protection during firefighting
Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing. Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures
Absorb spillage to prevent material damage.

6.1.1. For non-emergency personnel
Emergency procedures
Evacuate unnecessary personnel.

6.1.2. For emergency responders
Protective equipment
Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection". Equip cleanup crew with proper protection.

Emergency procedures
Ventilate area.

6.2. Environmental precautions

Avoid release to the environment. Notify authorities if product enters sewers or public waters. 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: Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.
Other information: Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections
For further information refer to section 13. See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling
Precautions for safe handling: Do not handle until all safety precautions have been read and understood. Wear personal protective equipment. Avoid contact with skin and eyes. Avoid breathing vapours. Ensure good ventilation. 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 vapour. Obtain special instructions before use. Do not breathe vapours.
Hygiene measures: Separate working clothes from town clothes. Launder separately. Do not eat, drink or smoke when using this product. Always wash hands after handling the product. Wash Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities
Storage conditions: Store locked up. Store in a well-ventilated place. Keep cool. Keep only in the original container in a cool, well ventilated place away from: Heat sources. Keep container closed when not in use.
Incompatible products: Strong bases. Strong acids.
Incompatible materials: Avoid contact with strong oxidizers. Sources of ignition. Direct sunlight.

7.3. Specific end use(s)
No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

<table>
<thead>
<tr>
<th>Brewer Cote Mastic Patch</th>
<th>ACGIH</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACGIH</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
<tr>
<td>OSHA</td>
<td>carbon black (1333-86-4)</td>
<td></td>
</tr>
<tr>
<td>ACGIH</td>
<td>ACGIH TWA (mg/m³)</td>
<td>3 mg/m³</td>
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<td>ACGIH</td>
<td>Remark (ACGIH)</td>
<td>Bronchitis</td>
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<tr>
<td>OSHA</td>
<td>OSHA PEL (TWA) (mg/m³)</td>
<td>3.5 mg/m³</td>
</tr>
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<td>titanium(IV) oxide (13463-67-7)</td>
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<td></td>
</tr>
<tr>
<td>ACGIH</td>
<td>ACGIH TWA (mg/m³)</td>
<td>1 mg/m³</td>
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<tr>
<td>ACGIH</td>
<td>Remark (ACGIH)</td>
<td>LRT irr; A3</td>
</tr>
<tr>
<td>OSHA</td>
<td>OSHA PEL (TWA) (mg/m³)</td>
<td>15 mg/m³</td>
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<tr>
<td>silica (14808-60-7)</td>
<td>ACGIH</td>
<td>OSHA</td>
</tr>
<tr>
<td>ACGIH</td>
<td>ACGIH TWA (mg/m³)</td>
<td>0.025 mg/m³</td>
</tr>
<tr>
<td>OSHA</td>
<td>Remark (OSHA)</td>
<td>(3) See Table Z-3.</td>
</tr>
<tr>
<td>asphaltic bitumen, not cut back (8052-42-4)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACGIH</td>
<td>Not applicable</td>
<td></td>
</tr>
<tr>
<td>OSHA</td>
<td>Not applicable</td>
<td></td>
</tr>
<tr>
<td>thickening clay (12174-11-7)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACGIH</td>
<td>Not applicable</td>
<td></td>
</tr>
<tr>
<td>OSHA</td>
<td>Not applicable</td>
<td></td>
</tr>
</tbody>
</table>
8.2. Exposure controls

Appropriate engineering controls: Ensure good ventilation.
Personal protective equipment: Gloves. Safety glasses. Avoid all unnecessary exposure.

Hand protection: protective gloves. Wear protective gloves.
Eye protection: Safety glasses. Chemical goggles or safety glasses.
Skin and body protection: Wear suitable protective clothing.
Respiratory protection: Wear respiratory protection. Wear appropriate mask.
Environmental exposure controls: Avoid release to the environment.
Other information: Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: Liquid
Appearance: a black thick liquid/mastic like consistency with a mild hydrocarbon odor.
Colour: Black
Odour: Very mild hydrocarbon odor.
Odour threshold: No data available
pH: No data available
Relative evaporation rate (butylacetate=1): No data available
Melting point: No data available
Freezing point: No data available
Boiling point: = 212 °F
Flash point: No data available
Auto-ignition temperature: No data available
Decomposition temperature: No data available
Flammability (solid, gas): No data available
Vapour pressure: No data available
Relative vapour density at 20 °C: No data available
Relative density: No data available
Density: = 1.3 g/cm³
Solubility: Water: Solubility in water of component(s) of the mixture:
- carbon black: < 0.01 g/100ml
- lithium hydroxide, monohydrate: 22.3 g/100ml
- tertiary-octylphenoxypoly(ethoxyethanol): Complete
- silica: insoluble
- titanium(IV) oxide: 0.15 g/100ml
- 2, 2, 4-trimethyl-1. 3-pentanediol monoisobutyrate: 0.090 g/100ml
- 2-(2-aminoethylamino)ethanol: Complete
- methyl benzimidazol-2-ylcarbamate: 0.0008 g/100ml
- kaolin: < 0.1 g/100ml
- 3-iodo-2-propynyl butylcarbamate: 0.02 g/100ml
- magnesium carbonate: < 0.1 g/100ml
- thickening clay: insoluble

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
Oxidising 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

Product is stable.
10.2. Chemical stability
Stable under normal conditions. Not established.

10.3. Possibility of hazardous reactions
Refer to section 10.1 on Reactivity. Not established.

10.4. Conditions to avoid
Refer to Section 10 on Incompatible Materials. Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

10.6. Hazardous decomposition products

**SECTION 11: Toxicological information**

11.1. Information on toxicological effects

<table>
<thead>
<tr>
<th><strong>Acute toxicity</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>carbon black (1333-86-4)</td>
<td></td>
</tr>
<tr>
<td>LD50 oral rat</td>
<td>&gt; 8000 mg/kg (Rat; OECD 401; Acute Oral Toxicity; Experimental value)</td>
</tr>
<tr>
<td>LD50 dermal rabbit</td>
<td>&gt; 3000 mg/kg (Rabbit)</td>
</tr>
<tr>
<td>titanium(IV) oxide (13463-67-7)</td>
<td></td>
</tr>
<tr>
<td>LD50 oral rat</td>
<td>&gt; 10000 mg/kg (Rat; OECD 425: Acute Oral Toxicity: Up-and-Down Procedure; Experimental value; &gt; 5000 mg/kg bodyweight; Rat; Experimental value)</td>
</tr>
<tr>
<td>LD50 dermal rabbit</td>
<td>&gt; 10000 mg/kg (Rabbit; Experimental value)</td>
</tr>
<tr>
<td>LC50 inhalation rat (mg/l)</td>
<td>&gt; 6.6 mg/l/4h (Rat; Experimental value)</td>
</tr>
</tbody>
</table>

Skin corrosion/irritation : Not classified
Serious eye damage/irritation : Not classified
Respiratory or skin sensitisation : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : May cause cancer.

| carbon black (1333-86-4) |                  |
| IARC group               | 2B - Possibly carcinogenic to humans |
| titanium(IV) oxide (13463-67-7) |                  |
| IARC group               | 2B - Possibly carcinogenic to humans |
| silica (14808-60-7)      |                  |
| IARC group               | 1 - Carcinogenic to humans |
| asphaltic bitumen, not cut back (8052-42-4) |                  |
| IARC group               | 2A - Probably carcinogenic to humans, 2B - Possibly carcinogenic to humans |
| thickening clay (12174-11-7) |                  |
| IARC group               | 2B - Possibly carcinogenic to humans, 3 - Not classifiable |

Reproductive toxicity : Not classified
Specific target organ toxicity (single exposure) : Not classified

Specific target organ toxicity (repeated exposure) : Causes damage to organs through prolonged or repeated exposure.

Aspiration hazard : Not classified
Potential adverse human health effects and symptoms : Based on available data, the classification criteria are not met.
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SECTION 12: Ecological information

12.1. Toxicity
Ecology - general : This product may cause adverse environmental effects if used improperly or released 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.

12.2. Persistence and degradability
Brewer Cote Mastic Patch
Persistence and degradability : Not established.

12.3. Bioaccumulative potential
Brewer Cote Mastic Patch
Bioaccumulative potential : Not established.

12.4. Mobility in soil
No additional information available

12.5. Other adverse effects
Effect on ozone layer :
Effect on the global warming : No known ecological damage caused by this product.
Other information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods
Waste treatment methods : This product, when discarded or disposed of, is not specifically listed as a hazardous waste in federal regulations. It could be designated as 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.

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container in accordance with all local, state, and national regulations.

Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information
In accordance with DOT
Not regulated for transport

Additional information
Other information : Not classified as a hazardous material under HM-181.

ADR
No additional information available

Transport by sea
No additional information available

Air transport
No additional information available

SECTION 15: Regulatory information

15.1. US Federal regulations
Brewer Cote Mastic Patch
Not listed on the United States TSCA (Toxic Substances Control Act) inventory

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory except for:

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS No</th>
<th>Percentage</th>
</tr>
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<tbody>
<tr>
<td>silica</td>
<td>14508-60-7</td>
<td>28.1716%</td>
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<tr>
<td>lithium hydroxide, monohydrate</td>
<td>1310-66-3</td>
<td>0.0107%</td>
</tr>
<tr>
<td>thickening clay</td>
<td>12174-11-7</td>
<td>2.2184%</td>
</tr>
</tbody>
</table>

05/19/2015 EN (English)
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This product or mixture does not contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

15.2. International regulations

CANADA
No additional information available

EU-Regulations
No additional information available

Classification according to Regulation (EC) No. 1272/2008 [CLP]
Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]
Not classified

15.2.2. National regulations

carbon black (1333-86-4)
Listed on IARC (International Agency for Research on Cancer)

titanium(IV) oxide (13463-67-7)
Listed on IARC (International Agency for Research on Cancer)

15.3. US State regulations
California Proposition 65 - This product contains, or may contain, trace quantities of a substance(s) known to the state of California to cause cancer and/or reproductive toxicity

carbon black (1333-86-4)

<table>
<thead>
<tr>
<th>U.S. - California - Proposition 65 - Carcinogens List</th>
<th>U.S. - California - Proposition 65 - Developmental Toxicity</th>
<th>U.S. - California - Proposition 65 - Reproductive Toxicity - Female</th>
<th>U.S. - California - Proposition 65 - Reproductive Toxicity - Male</th>
<th>No significance risk level (NSRL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

thickening clay (12174-11-7)

<table>
<thead>
<tr>
<th>U.S. - California - Proposition 65 - Carcinogens List</th>
<th>U.S. - California - Proposition 65 - Developmental Toxicity</th>
<th>U.S. - California - Proposition 65 - Reproductive Toxicity - Female</th>
<th>U.S. - California - Proposition 65 - Reproductive Toxicity - Male</th>
<th>No significance risk level (NSRL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
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</table>

carbon black (1333-86-4)

<table>
<thead>
<tr>
<th>U.S. - New Jersey - Right to Know Hazardous Substance List</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>
titanium(IV) oxide (13463-67-7)

<table>
<thead>
<tr>
<th>U.S. - New Jersey - Right to Know Hazardous Substance List</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>
asphaltic bitumen, not cut back (8052-42-4)

<table>
<thead>
<tr>
<th>U.S. - New Jersey - Right to Know Hazardous Substance List</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

SECTION 16: Other information

Other information : None.
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Full text of H-phrases:

<table>
<thead>
<tr>
<th>Carc. 1A</th>
<th>Carcinogenicity, Category 1A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carc. 2</td>
<td>Carcinogenicity, Category 2</td>
</tr>
<tr>
<td>STOT RE 1</td>
<td>Specific target organ toxicity — Repeated exposure, Category 1</td>
</tr>
<tr>
<td>H350</td>
<td>May cause cancer</td>
</tr>
<tr>
<td>H351</td>
<td>Suspected of causing cancer</td>
</tr>
<tr>
<td>H372</td>
<td>Causes damage to organs through prolonged or repeated exposure</td>
</tr>
</tbody>
</table>

NFPA health hazard: 1 - Exposure could cause irritation but only minor residual injury even if no treatment is given.

NFPA fire hazard: 0 - Materials that will not burn.

NFPA reactivity: 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.

HMIS III Rating
Health: 1 Slight Hazard - Irritation or minor reversible injury possible
Flammability: 0 Minimal Hazard
Physical: 0 Minimal Hazard
Personal Protection: B

TBC SDS US (GHS Hazcom 2012)

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 user’s 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.