Section 1 - Product and Company Identification

<table>
<thead>
<tr>
<th>Material Name</th>
<th>Black Jack Blacktop Crack and Hole Repair</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemical Category</td>
<td>Mixture</td>
</tr>
<tr>
<td>Product Code</td>
<td>6460-9-20</td>
</tr>
<tr>
<td>Product Description</td>
<td>Asphalt emulsion driveway crack sealer and patch.</td>
</tr>
<tr>
<td>Product Use</td>
<td>Filler and sealant for asphalt pavements.</td>
</tr>
<tr>
<td>Synonyms</td>
<td>Low VOC Water Based Asphalt Coating</td>
</tr>
<tr>
<td>Manufacturer</td>
<td>Gardner-Gibson</td>
</tr>
<tr>
<td></td>
<td>4161 E. 7th Avenue</td>
</tr>
<tr>
<td></td>
<td>Tampa, FL 33605</td>
</tr>
<tr>
<td></td>
<td>United States</td>
</tr>
<tr>
<td>Telephone</td>
<td></td>
</tr>
<tr>
<td>Emergency</td>
<td>800-424-9300 - CHEMTREC</td>
</tr>
<tr>
<td>Emergency</td>
<td>703-527-3887 - CHEMTREC (Outside US)</td>
</tr>
<tr>
<td>Last Revision Date</td>
<td>10/2/2014</td>
</tr>
</tbody>
</table>

Section 2 - Hazards Identification

Signal Word: WARNING!

Hazards and Precautions

May be harmful if swallowed. May cause respiratory irritation. Causes eye irritation. Causes mild skin irritation. Contains Petroleum Based Products. Use only with adequate ventilation. Avoid prolonged breathing of vapor or spray mist. Keep product closed and properly stored when not in use. Avoid contact with skin. Use protective gloves, safety glasses, and protective clothing when using this product. Do not use in drinking water or food systems. Do not reuse empty container. Make sure container is sealed and secured in an upright position during transportation. Do not eat or drink while using this product and wash hand thoroughly after use.

Prevention: Do not breathe dust, fume, gas, mist, vapours and/or spray. Do not handle until all safety precautions have been read and understood.

Response: IF exposed or if you feel unwell: Call a POISON CENTER or doctor/physician.

Physical Form: Liquid
Color: Black
Odor: Mild Hydrocarbon
Flash Point: 460 F (237.7778 °C)

OSHA(HCS2012): Specific Target Organ Toxicity Repeated Exposure - Category 2, Skin Corrosion/Irritation - Category 2, Serious Eye Damage, Eye Irritation - Category 2, Carcinogenicity - Category 1A

WHMIS: Class D - Poisonous and Infectious Materials - Division 2 - Subdivision A

GHS: Specific Target Organ Toxicity Repeated Exposure - Category 2, Skin
Corrosion/Irritation - Category 2, Serious Eye Damage, Eye Irritation - Category 2, Carcinogenicity - Category 1A

Route Of Entry
- Inhalation, Skin, Eye

Potential Health Effects

Inhalation
  
  **Acute (Immediate)**
  - May cause irritation.

  **Chronic (Delayed)**
  - No data available

Skin
  
  **Acute (Immediate)**
  - May cause irritation.

  **Chronic (Delayed)**
  - Repeated and prolonged exposure may cause dermatitis.

Eye
  
  **Acute (Immediate)**
  - May cause burning and redness or swelling of the eyes. May cause irritation.

  **Chronic (Delayed)**
  - Repeated and prolonged exposure may cause irritation.

Ingestion
  
  **Acute (Immediate)**
  - May be harmful or fatal if swallowed.

  **Chronic (Delayed)**
  - No data available

Carcinogenic Effects
- See Section 11 - Toxicological Information.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS</th>
<th>IARC</th>
<th>NTP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asphalt</td>
<td>8052-42-4</td>
<td>Group 2B-Possible Carcinogen</td>
<td>Under Consideration</td>
</tr>
<tr>
<td>Quartz</td>
<td>14808-60-7</td>
<td>Group 1-Carcinogenic</td>
<td>Known Human Carcinogen</td>
</tr>
</tbody>
</table>

Other Information
- This product is an encapsulated mixture which reduces the likelihood of exposure to hazardous particulates. Airborne exposures to hazardous dusts or mists may be generated by spraying, sanding or grinding. During spraying or sanding the product, wear suitable respiratory equipment to protect against inhalation of mist and dust.

See Section 12 for Ecological Information.

Section 3 - Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS</th>
<th>% (wt)</th>
<th>UN;EINECS</th>
<th>LD50/LC50</th>
<th>Classifications According to Regulation/Directive</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quartz</td>
<td>14808-60-7</td>
<td>40% TO 60%</td>
<td>238-878-4</td>
<td></td>
<td>WHMIS: Other Toxic Effects - D2A; OSHA: Carc. 1A; STOT RE 1</td>
<td>NDA</td>
</tr>
<tr>
<td>Asphalt</td>
<td>8052-42-4</td>
<td>10% TO 20%</td>
<td>NA1999, 232-490-9</td>
<td>Ingestion/Oral-Rat LD50 &gt;5000 mg/kg; Inhalation-Rat LC50 &gt;94.4 mg/m³</td>
<td>OSHA: Carc.; Irrit. WHMIS: Other Toxic Effects - D2A; UN GHS: Carc. 2; Eye Irrit. 2A; Skin Irrit. 2</td>
<td>NDA</td>
</tr>
<tr>
<td>Bentonite</td>
<td>1302-78-9</td>
<td>1% TO 10%</td>
<td>215-108-5</td>
<td></td>
<td>WHMIS: Other Toxic Effects - D2A; UN GHS: STOT RE 2</td>
<td>NDA</td>
</tr>
<tr>
<td>Kaolin</td>
<td>1332-58-7</td>
<td>1% TO 10%</td>
<td></td>
<td></td>
<td>WHMIS: Other Toxic Effects - D2A; UN GHS: Eye Irrit. 2A; STOT RE 2</td>
<td>NDA</td>
</tr>
</tbody>
</table>

Non-Hazardous Components

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS</th>
<th>% (wt)</th>
<th>UN;EINECS</th>
<th>LD50/LC50</th>
<th>EU R &amp; S Phrases</th>
<th>Other</th>
</tr>
</thead>
</table>

Page 2 of 7
### Hazardous Components

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS</th>
<th>%(wt)</th>
<th>UN;EINECS</th>
<th>LD50/LC50</th>
<th>Classifications According to Regulation/Directive</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>20% TO 30%</td>
<td>231-791-2</td>
<td>Ingestion/Oral-Rat LD50 &gt; 90 mL/kg</td>
<td>NDA</td>
<td>NDA</td>
</tr>
</tbody>
</table>

This product is an encapsulated mixture which reduces the likelihood of exposure to hazardous particulates. Airborne exposures to hazardous dusts or mists may be generated by spraying, sanding or grinding.

See Section 11 for Toxicological Information.

### Section 4 - First Aid Measures

**Inhalation**
- Remove to fresh air if feel unwell. Call a physician or poison control center. If not breathing, give artificial respiration.

**Skin**
- Wash the contaminated area of body with soap and fresh water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

**Eye**
- Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first five minutes, then continue rinsing eye. If eye irritation persists: Get medical advice/attention.

**Ingestion**
- Call a physician or poison control center immediately. Do not give anything by mouth to an unconscious person. Do NOT induce vomiting.

See Section 2 for Potential Health Effects.

### Section 5 - Fire Fighting Measures

**Extinguishing Media**
- SMALL FIRES: Dry chemical, CO2, water spray or regular foam.

**Unsuitable Extinguishing Media**
- No data available

**Firefighting Procedures**
- Keep unauthorized personnel away. Stay upwind of fire to prevent exposure. Fire fighters should wear complete protective clothing including self-contained breathing apparatus.

**Unusual Fire and Explosion Hazards**
- Some of these materials may burn, but will not readily ignite. May release irritating or toxic gases, fumes, or vapors.

**Hazardous Combustion Products**
- Carbon monoxide, carbon dioxide, hydrocarbons.

**Protection of Firefighters**
- Wear positive pressure self-contained breathing apparatus (SCBA).

**Flash Point**
- 460°F(238°C)

### Section 6 - Accidental Release Measures

**Personal Precautions**
- Do not contact damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate enclosed areas when cleaning spills.

**Emergency Procedures**
- Stop leak if you can do it without risk. Isolate the area and contain the spilled material. Persons not wearing the appropriate PPE should be removed from the area until the spill is cleaned up.

**Environmental Precautions**
- Avoid run off to waterways and sewers.

**Containment/Clean-up Measures**
- Use appropriate Personal Protective Equipment (PPE) Contain and/or absorb spill with inert material (e.g. sand, vermiculite), then place in suitable container.

**Prohibited Materials**
- Avoid contact with strong oxidizing agents and acids.

Page 3 of 7
Section 7 - Handling and Storage

Handling
- Keep containers tightly closed when not in use. Use only with adequate ventilation.

Storage
- Keep only in the original container/package in a cool well-ventilated place. Keep away from fire. Keep container closed when not in use.

Special Packaging Materials
- No data available

Incompatible Materials or Ignition Sources
- Avoid contact with strong oxidizing agents and acids.

Section 8 - Exposure Controls/Personal Protection

Personal Protective Equipment

Pictograms

Respiratory
- When used with adequate ventilation, a respirator is not normally required. If required, use a NIOSH-approved air purifying respirator with organic vapor cartridge or supplied air respirator. This product is an encapsulated mixture which reduces the likelihood of exposure to hazardous particulates. Airborne exposures to hazardous dusts or mists may be generated by spraying, sanding or grinding.

Eye/Face
- Wear ANSI approved safety glasses with side shields or safety goggles.

Hands
- Wear chemical protective gloves made of Nitrile or Neoprene.

Skin/Body
- Wear clothing that covers the skin to prevent skin exposure.

General Industrial Hygiene Considerations
- Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke during work. Wash hands before eating.

Engineering Measures/Controls
- Adequate ventilation systems as needed to control concentrations of airborne contaminants below applicable threshold limit values.

<table>
<thead>
<tr>
<th>Result</th>
<th>ACGIH</th>
<th>OSHA</th>
<th>United States - California</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kaolin (1332-58-7)</td>
<td>TWAs 2 mg/m3 TWA (particulate matter containing no asbestos and &lt;1% crystalline silica, respirable fraction)</td>
<td>15 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable fraction)</td>
<td>2 mg/m3 PEL (respirable dust, containing no asbestos fibers, &lt; 1% crystalline silica)</td>
</tr>
<tr>
<td>Asphalt (8052-42-4)</td>
<td>TWAs 0.5 mg/m3 TWA (as benzene soluble aerosol, fume, inhalable fraction)</td>
<td>Not established</td>
<td>5 mg/m3 PEL (fume)</td>
</tr>
<tr>
<td>Quartz (14808-60-7)</td>
<td>TWAs 0.025 mg/m3 TWA (respirable fraction)</td>
<td>Not established</td>
<td>0.3 mg/m3 PEL (total dust); 0.1 mg/m3 PEL (respirable dust)</td>
</tr>
</tbody>
</table>

Exposure Control Notations

ACGIH
- Kaolin (1332-58-7): Carcinogens: A4 - Not Classifiable as a Human Carcinogen
- Asphalt (8052-42-4): Carcinogens: A4 - Not Classifiable as a Human Carcinogen (fume, coal tar-free)
- Quartz (14808-60-7): Carcinogens: A2 - Suspected Human Carcinogen
Section 9 - Physical and Chemical Properties

Physical Form - Liquid
Appearance/Description - Thick black semi-liquid.

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color</td>
<td>Black</td>
</tr>
<tr>
<td>Odor</td>
<td>Mild Hydrocarbon</td>
</tr>
<tr>
<td>Taste</td>
<td>NDA</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>NDA</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>212 F(100 C)</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>NDA</td>
</tr>
<tr>
<td>Melting Point</td>
<td>NDA</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>&gt; 1 Air=1</td>
</tr>
<tr>
<td>Specific Gravity/Relative Density</td>
<td>= 1.63 Water=1</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>&lt; 1 Water = 1</td>
</tr>
<tr>
<td>Density</td>
<td>= 13.57 lbs/gal</td>
</tr>
<tr>
<td>VOC (Wt.)</td>
<td>NDA</td>
</tr>
<tr>
<td>Bulk Density</td>
<td>NDA</td>
</tr>
<tr>
<td>Volatiles (Wt.)</td>
<td>NDA</td>
</tr>
<tr>
<td>pH</td>
<td>NDA</td>
</tr>
<tr>
<td>Volatiles (Vol.)</td>
<td>NDA</td>
</tr>
<tr>
<td>Water Solubility</td>
<td>NDA</td>
</tr>
<tr>
<td>Solvent Solubility</td>
<td>NDA</td>
</tr>
<tr>
<td>Flash Point</td>
<td>460 F(237.7778 C)</td>
</tr>
<tr>
<td>Viscosity</td>
<td>NDA</td>
</tr>
<tr>
<td>Flash Point Test Type</td>
<td>NDA</td>
</tr>
</tbody>
</table>

Section 10 - Stability and Reactivity

Stability - Stable under normal temperatures and pressures.
Hazardous Polymerization - Hazardous polymerization not indicated.
Conditions to Avoid - Avoid contact with strong oxidizing agents and acids.
Incompatible Materials - Strong oxidizers and acids.
Hazardous Decomposition Products - Carbon monoxide, carbon dioxide and hydrocarbons.

Section 11 - Toxicological Information

<table>
<thead>
<tr>
<th>Component Name</th>
<th>Concentration</th>
<th>CAS</th>
<th>Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quartz</td>
<td>40% TO 60%</td>
<td>14808-60-7</td>
<td>Acute Toxicity: ; orl-rat TDLo:120 gm/kg</td>
</tr>
<tr>
<td>Asphalt</td>
<td>10% TO 20%</td>
<td>8052-42-4</td>
<td>Acute Toxicity: ; orl-rat LD50:5000 mg/kg; ihl-rat LC50:94.4 mg/m3; ihl-hmn TDLo:10 mg/m3/5.5Y-I; Tumorigen/Carcinogen: ; skn-mus TDLo:905 gm/kg/2Y-I</td>
</tr>
<tr>
<td>Bentonite</td>
<td>1% TO 10%</td>
<td>1302-78-9</td>
<td>Acute Toxicity: ; orl-rat TDLo:700 mg/kg/7D-I</td>
</tr>
<tr>
<td>Kaolin</td>
<td>1% TO 10%</td>
<td>1332-58-7</td>
<td>Acute Toxicity: ; orl-rat TDLo:370 gm/kg/37D-I</td>
</tr>
</tbody>
</table>

Other Component Information - IARC has concluded that the following chemicals in this product are carcinogenic to humans (Group 1): silica, quartz. ACGIH has designated the following chemicals in this product as suspected human carcinogens (A2): silica, quartz. NTP has listed the following chemicals in this product as known human carcinogens: silica, quartz. Risk of cancer depends on duration and level of exposure to this product as a dust or aerosol mist. Airborne exposure is not expected with this product. The materials are encapsulated and would only be released if the dry material was sanded. Exposure could increase if the product is sprayed.

Other Information - This product contains petroleum asphalt. Petroleum asphalt is not listed as a carcinogen by OSHA or NTP. The National Institute of Occupational Safety and Health (NIOSH), has concluded that at higher temperatures roofing asphalt fumes are a potential occupational carcinogen. If this product is heated or comes in contact with heated material, avoid breathing fumes. This product may contain small amounts of polycyclic aromatic hydrocarbons (PAH’s) which are recognized carcinogens in humans and experimental animals. Mouse skin painting studies of roofing asphalt vapor concentrate have shown evidence of tumor formation associated with localized skin irritation in recent studies. Inhalation studies of high airborne concentrations of asphalt/bitumen fumes in rats and mice produced bronchitis, pneumonitis, and lung changes such as fibrosis and cell damage.
Section 12 - Ecological Information

Ecological Fate - No data available.
Persistence/Degradability - No data available.
Bioaccumulation Potential - No data available.
Mobility in Soil - No data available.

Section 13 - Disposal Considerations

Product - Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Section 14 - Transportation Information

DOT - United States - Department of Transportation
Shipping Name: Not Restricted

TDG - Canada - Transport of Dangerous Goods
Shipping Name: Not Restricted

IMO/IMDG –International Maritime Transport
Shipping Name: Not Restricted

IATA – International Air Transport Association
Shipping Name: Not Restricted

Section 15 - Regulatory Information

SARA Hazard Classifications - Acute, Chronic
Risk & Safety Phrases - California PROP 65: Asphalt and Asphalt Fumes may contain detectable amounts of chemicals known to the State of California to cause cancer or reproductive harm.

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS</th>
<th>MA</th>
<th>MN</th>
<th>NJ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Quartz</td>
<td>14808-60-7</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Asphalt</td>
<td>8052-42-4</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Bentonite</td>
<td>1302-78-9</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Kaolin</td>
<td>1332-58-7</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS</th>
<th>EU EINECS</th>
<th>TSCA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Quartz</td>
<td>14808-60-7</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Asphalt</td>
<td>8052-42-4</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Bentonite</td>
<td>1302-78-9</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>
### Inventory

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS</th>
<th>EU EINECS</th>
<th>TSCA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kaolin</td>
<td>1332-58-7</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

### Canada - WHMIS - Ingredient Disclosure List

- **Kaolin**
  - CAS: 1332-58-7
  - EU EINECS: 1% TO 10%
  - TSCA: Not Listed
- **Asphalt**
  - CAS: 8052-42-4
  - EU EINECS: 10% TO 20%
  - TSCA: Not Listed
- **Quartz**
  - CAS: 14808-60-7
  - EU EINECS: 40% TO 60%
  - TSCA: 1%
- **Bentonite**
  - CAS: 1302-78-9
  - EU EINECS: 1% TO 10%
  - TSCA: Not Listed
- **Water**
  - CAS: 7732-18-5
  - EU EINECS: 20% TO 30%
  - TSCA: Not Listed

### U.S. - California - Proposition 65 - Carcinogens List

- **Kaolin**
  - CAS: 1332-58-7
  - EU EINECS: 1% TO 10%
  - TSCA: Not Listed
- **Asphalt**
  - CAS: 8052-42-4
  - EU EINECS: 10% TO 20%
  - TSCA: Not Listed
- **Quartz**
  - CAS: 14808-60-7
  - EU EINECS: 40% TO 60%
  - TSCA: Carcinogen, initial date 10/1/88 (airborne particles of respirable size)
- **Bentonite**
  - CAS: 1302-78-9
  - EU EINECS: 1% TO 10%
  - TSCA: Not Listed
- **Water**
  - CAS: 7732-18-5
  - EU EINECS: 20% TO 30%
  - TSCA: Not Listed

### Section 16 - Other Information

**Last Revision Date**
- 10/02/2014

**Prepared By**
- Gardner-Gibson Inc

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