Section 1 - Product and Company Identification

Material Name - Black Jack Roll Roofing Adhesive
Chemical Category - Mixture
Product Code - 6150-9-34
Product Description - Asphalt Based Roofing adhesive.
Product Use - Roll roofing adhesive.
Manufacturer - Gardner-Gibson
4161 E. 7th Avenue
Tampa, FL 33605
United States
Telephone
Emergency - 800-424-9300 - CHEMTREC
Emergency - 703-527-3887 - CHEMTREC (Outside US)
Last Revision Date - 02/03/2015

Section 2 - Hazards Identification

GHS HAZARDS AND PRECAUTIONS

SIGNAL WORD: WARNING!

Flammable liquid and vapor. Contains Combustible Petroleum Distillates. Harmful or Fatal if swallowed. Keep away from heat, sparks, and open flame. Avoid prolonged breathing of vapor and use only in adequate ventilation. Repeated and prolonged overexposure to solvent vapor may cause brain and nervous system damage, respiratory tract irritation, dizziness, or loss of consciousness. May cause skin and eye irritation.

Prevention - Keep away from heat, sparks, open flames and/or hot surfaces. - No smoking. - Use personal protective equipment as required. Keep container tightly closed.

Response - IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF ON SKIN (or hair): Rinse skin with water/shower.

Storage/Disposal - Dispose of content and/or container in accordance with local, regional, national, and/or international regulations. Store in a well-ventilated place. Keep cool.

Physical Form - Liquid
Color - Black
Odor - Mild Hydrocarbon.
Flash Point - 105° F(41°C)
OSHA HCS 2012 - Flammable Liquids - Category 3, Skin Corrosion/Irritation - Category 2, Serious Eye Damage, Eye Irritation - Category 2A, Carcinogenicity - Category 1A
WHMIS - Class B - Flammable and Combustible Materials - Division 3, Class D - Poisonous and Infectious Materials - Division 2 - Subdivision A, Class D - Poisonous and Infectious Materials - Division 2 - Subdivision B
GHS - Specific Target Organ Toxicity Repeated Exposure - Category 2, Skin
Corrosion/Irritation - Category 2, Serious Eye Damage, Eye Irritation - Category 2A, Carcinogenicity - Category 1A

Route Of Entry
- Inhalation, Skin, Eye, Ingestion/Oral

Potential Health Effects

Inhalation
Acute (Immediate) - May cause irritation. Excessive breathing of high vapor concentration can cause possible unconsciousness and even asphyxiation.
Chronic (Delayed) - Refer to other information found in Section 11-Toxicology.

Skin
Acute (Immediate) - May cause irritation.
Chronic (Delayed) - Repeated and prolonged exposure may cause dermatitis.

Eye
Acute (Immediate) - 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.

Section 3 - Composition/Information on Ingredients

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>
</tr>
</thead>
<tbody>
<tr>
<td>Asphalt</td>
<td>8052-42-4</td>
<td>40% TO 60%</td>
<td>NA1999, 232-490-9</td>
<td>Ingestion/Oral-Rat LD50 ≥5000 mg/kg Inh, Rat LC50 ≥94.4 mg/m³</td>
<td>WHMIS: Other Toxic Effects - D2A</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>UN GHS: Carc. 2; Eye Irrit. 2A; Skin Irrit. 2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>EU DSD/DPD:</td>
</tr>
<tr>
<td>Mineral Spirits</td>
<td>8052-41-3</td>
<td>15% TO 25%</td>
<td>232-489-3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bentonite</td>
<td>1302-78-9</td>
<td>1% TO 5%</td>
<td>215-108-5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cellulose</td>
<td>9004-34-6</td>
<td>1% TO 5%</td>
<td>232-674-9</td>
<td>Ingestion/Oral-Rat LD50 ≥5 g/kg Inh, Rat LC50 ≥5800 mg/m³ 4 Hour(s) Skin-Rabbit LD50 ≥2 g/kg</td>
<td></td>
</tr>
<tr>
<td>1,2,4-Trimethylbenzene</td>
<td>95-63-6</td>
<td>0.5% TO 1.5%</td>
<td>202-436-9</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>UN GHS: Other Toxic Effects - D2B</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>UN GHS: Eye Irrit. 2A; Skin Irrit. 2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>EU DSD/DPD:</td>
</tr>
<tr>
<td>Benzene, 1,3,5-</td>
<td>108-67-8</td>
<td>0.5% TO 1.5%</td>
<td>UN2325, 203-604-4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>trimethyl</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></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>Classifications According to Regulation/Directive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>25% TO 35%</td>
<td>231-791-2</td>
<td>Ingestion/Oral-Rat LD50 ≥90 mL/kg</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 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If breathing is difficult, give oxygen. Get medical attention immediately.

Skin - IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse.

Eye - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Ingestion - Call a physician or poison control center immediately. If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

See Section 2 for Potential Health Effects.

Section 5 - Fire Fighting Measures

Extinguishing Media - Use CO2, dry chemical, or foam.

Unsuitable Extinguishing Media - Do not use direct stream of water.

Firefighting Procedures - Fight advanced or massive fires from safe distance or protected location. Avoid water in a straight hose stream as the stream will cause splatter and spread fire. If product is heated above its flash point it will produce vapors sufficient to support combustion. Vapors are heavier than air and may travel along the ground and can be ignited by pilot lights, other flames and ignition sources at locations near the point of release.

Unusual Fire and Explosion Hazards - Combustible liquid.

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

Protection of Firefighters - Firefighters should wear self-contained breathing apparatus and full protective gear.

Flash Point - 105°F (41°C) CC (Closed Cup)

Explosion Limits - 
Upper - 6 %
Lower - .9 %

Section 6 - Accidental Release Measures

Personal Precautions - If you have not donned special protective clothing approved for this material, do not respond until you are protected with proper PPE. Stay upwind. Ventilate the area before entry.

Emergency Procedures - ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Stop leak if you can do so without risk. Keep unauthorized personnel away.

Environmental Precautions - Prevent entry into waterways, sewers, basements or confined areas.

Containment/Clean-up Measures - Use appropriate Personal Protective Equipment (PPE) Contain and recover liquid when possible. Absorb or cover with sand or other non-combustible material and transfer to containers for proper disposal.

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

Section 7 - Handling and Storage

Handling - KEEP OUT OF THE REACH OF CHILDREN! Keep away from heat and sparks. Do not use in areas without adequate ventilation.

Storage - Store in a well-ventilated place. Keep container tightly closed. Keep container tightly closed. No open flames, no sparks and no smoking.
Section 8 - Exposure Controls/Personal Protection

Personal Protective Equipment

Pictograms

Respiratory - In case of insufficient ventilation, wear suitable respiratory equipment. If listed exposure limits are expected to be exceeded, use approved respiratory protection suitable for the hazard. 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.

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. Wash thoroughly with soap and water after handling. Do not smoke, eat, or drink while using this product.

Engineering Measures/Controls - Adequate ventilation systems as needed to control concentrations of airborne contaminants below applicable threshold limit values. Use precaution to protect building intake from fumes and vapors created outdoors.

<table>
<thead>
<tr>
<th>Exposure Limits/Guidelines</th>
<th>ACGIH</th>
<th>Canada Ontario</th>
<th>Mexico</th>
<th>OSHA</th>
<th>United States - California</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cellulose (9004-34-6)</td>
<td>TWAs</td>
<td>10 mg/m3 TWA</td>
<td>10 mg/m3 TWA (paper fibre, total dust)</td>
<td>15 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable fraction)</td>
<td>10 mg/m3 PEL (total dust); 5 mg/m3 PEL (respirable fraction)</td>
</tr>
<tr>
<td>Mineral Spirits (8052-41-3)</td>
<td>TWAs</td>
<td>100 ppm TWA</td>
<td>525 mg/m3 TWA (fume, inhalable, as benzene-soluble aerosol)</td>
<td>100 ppm TWA; 2900 mg/m3 TWA</td>
<td>100 ppm PEL; 525 mg/m3 PEL</td>
</tr>
<tr>
<td>Asphalt (8052-42-4)</td>
<td>TWAs</td>
<td>0.5 mg/m3 TWA (as benzene soluble aerosol, fume, inhalable fraction)</td>
<td>5 mg/m3 TWA</td>
<td>Not established</td>
<td>5 mg/m3 PEL (fume)</td>
</tr>
</tbody>
</table>

Exposure Control Notations
ACGIH
- Asphalt (8052-42-4): Carcinogens: A4 - Not Classifiable as a Human Carcinogen (fume, coal tar-free)

Key to abbreviations
- PEL = Permissible Exposure Level determined by the Occupational Safety and Health Administration (OSHA)

Section 9 - Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Physical Form:</th>
<th>Liquid</th>
<th>Appearance/Description:</th>
<th>Thick black semi-liquid.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color:</td>
<td>Black</td>
<td>Odor:</td>
<td>Mild Hydrocarbon.</td>
</tr>
<tr>
<td>Odor Threshold:</td>
<td>No data available.</td>
<td>Boiling Point:</td>
<td>310 to 400 F (154.4444 to 204.4444 C)</td>
</tr>
<tr>
<td>Melting Point:</td>
<td>Not relevant</td>
<td>Decomposition</td>
<td>Not relevant</td>
</tr>
<tr>
<td>Specific Gravity/Relative Density:</td>
<td>= 1.01 Water=1</td>
<td>Temperature:</td>
<td>Density:</td>
</tr>
<tr>
<td>----------------------------------</td>
<td>---------------</td>
<td>--------------</td>
<td>----------</td>
</tr>
<tr>
<td>Bulk Density:</td>
<td>Not relevant</td>
<td>Water Solubility:</td>
<td>Not relevant</td>
</tr>
<tr>
<td>Solvent Solubility:</td>
<td>No data available.</td>
<td>Viscosity:</td>
<td>22000 to 30000 Centipoise (cPs, cP) or mPas @ 77 F(25 C)</td>
</tr>
<tr>
<td>Vapor Pressure:</td>
<td>= 2 mmHg (torr) @ 68 F(20 C)</td>
<td>Vapor Density:</td>
<td>= 1 Air=1</td>
</tr>
<tr>
<td>Evaporation Rate:</td>
<td>= 1 Ether = 1</td>
<td>VOC (Wt.):</td>
<td>Not Listed</td>
</tr>
<tr>
<td>VOC (Vol.):</td>
<td>&lt; 250 g/L</td>
<td>Volatiles (Vol.):</td>
<td>Not Listed</td>
</tr>
<tr>
<td>Volatiles (Vol.):</td>
<td>&lt; 50 %</td>
<td>Flash Point:</td>
<td>105 F(40.5556 C)</td>
</tr>
<tr>
<td>Flash Point Test Type:</td>
<td>CC (Closed Cup)</td>
<td>UEL:</td>
<td>6 %</td>
</tr>
<tr>
<td>LEL:</td>
<td>0.9 %</td>
<td>Heat of Combustion (AHc):</td>
<td>Not relevant</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 flame.

**Incompatible Materials**
- Strong oxidizers.

**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>Asphalt</td>
<td>40% TO 60%</td>
<td>8052-42-4</td>
<td>Acute Toxicity: ; orl-rat LD50:&gt;5000 mg/kg; ihl-rat LC50:&gt;94.4 mg/m3; ihl-hmn TDLo:10 mg/m3/5.5Y-I</td>
</tr>
<tr>
<td>Bentonite</td>
<td>1% TO 5%</td>
<td>1302-78-9</td>
<td>Acute Toxicity: ; orl-rat TDLo:700 mg/kg/7D-I</td>
</tr>
<tr>
<td>Cellulose</td>
<td>1% TO 5%</td>
<td>9004-34-6</td>
<td>Acute Toxicity: ; orl-rat LD50:&gt;5 gm/kg; ihl-rat LC50:&gt;5800 mg/m3/4H; skn-rbt LD50:&gt;2 gm/kg</td>
</tr>
<tr>
<td>1,2,4-Trimethylbenzene</td>
<td>0.5% TO 1.5%</td>
<td>95-63-6</td>
<td>Acute Toxicity: ; orl-rat LD50:5 gm/kg; orl-rat TDLo:19600 mg/kg/4W-I; ihl-rat LC50:18000 mg/m3/4H</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 (minimal potential from clay). 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. 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. 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.

**Key to abbreviations**

<table>
<thead>
<tr>
<th>TC</th>
<th>Toxic Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>TD</td>
<td>Toxic Dose</td>
</tr>
<tr>
<td>LD</td>
<td>Lethal Dose</td>
</tr>
</tbody>
</table>
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 – Department of Transportation - Not Regulated when shipped in containers <119 gallons.

TDG - Canada Transportation of Dangerous Goods: Tars, Liquids; UN1999; Hazard Class: 3; Packing Group: III 1.33 Class 3, Flammable Liquids

TDG Transportation Other Information: Not Restricted under General Exemption for small container packaging

IMO/IMDG Transportation Other Information - IMDG Code 2.3.2.5 - exempted from marking, labeling & testing of packages.
IMO/IMDG –International Maritime Transport- TARS, LIQUID; UN1999; Hazard Class: 3; Packing Group: III

IATA Transportation Other Information - IATA - International Air Transportation Association - TARS, LIQUID; UN1999; Hazard Class: 3; Packing Group: III.

Section 15 - Regulatory Information

SARA Hazard Classifications - Acute, Chronic
Risk & Safety Phrases - California PROP 65: Asphalt and Asphalt Fumes (Bitumens), at high temperatures, 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>
<th>PA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Asphalt</td>
<td>8052-42-4</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Mineral Spirits</td>
<td>8052-41-3</td>
<td>Yes</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>
<td>No</td>
</tr>
<tr>
<td>Cellulose</td>
<td>9004-34-6</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>1,2,4-Trimethylbenzene</td>
<td>95-63-6</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Benzene, 1,3,5-trimethyl</td>
<td>108-67-8</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</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>Asphalt</td>
<td>8052-42-4</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Mineral Spirits</td>
<td>8052-41-3</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Bentonite</td>
<td>1302-78-9</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Component</td>
<td>CAS</td>
<td>EU EINECS</td>
<td>TSCA</td>
</tr>
<tr>
<td>----------------------------</td>
<td>---------</td>
<td>-----------</td>
<td>------</td>
</tr>
<tr>
<td>Cellulose</td>
<td>9004-34-6</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>1,2,4-Trimethylbenzene</td>
<td>95-63-6</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Benzene, 1,3,5-trimethyl</td>
<td>108-67-8</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

### Canada - WHMIS - Classifications of Substances

- **Cellulose**
  - CAS: 9004-34-6
  - Concentration: 1% TO 5%
  - Classification: Uncontrolled product according to WHMIS classification criteria (including microcrystalline and paper fibers)

- **Asphalt**
  - CAS: 8052-42-4
  - Concentration: 40% TO 60%
  - Classification: Not Listed

- **1,2,4-Trimethylbenzene**
  - CAS: 95-63-6
  - Concentration: 0.5% TO 1.5%
  - Classification: B3

- **Bentonite**
  - CAS: 1302-78-9
  - Concentration: 1% TO 5%
  - Classification: D2A

- **Water**
  - CAS: 7732-18-5
  - Concentration: 25% TO 35%
  - Classification: Uncontrolled product according to WHMIS classification criteria

- **Mineral Spirits**
  - CAS: 8052-41-3
  - Concentration: 15% TO 25%
  - Classification: B3, D2B

- **Benzene, 1,3,5-trimethyl**
  - CAS: 108-67-8
  - Concentration: 0.5% TO 1.5%
  - Classification: B3

### Section 16 - Other Information

- **Last Revision Date**
  - 02/03/15

- **Prepared By**
  - Gardner-Gibson Inc

- **Disclaimer/Statement of Liability**
  - This information relates to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is to the best of our knowledge and belief, accurate and reliable as of the date compiled. However, no representation, warranty or guarantee is made as to its accuracy, reliability or completeness. It is the user’s responsibility to verify the suitability and completeness of such information for particular use. Gardner-Gibson does not accept liability for any loss or damage that may occur from the use of this information.