SECTION 1 IDENTIFICATION

Identifier: Cationic Emulsified Asphalt
Cationic Quick Set, Cationic Rapid Set, Cationic Medium Set, Cationic Slow Set, Latex Modified, Polymer Modified, Rejuvinator Emulsions, Diluted Emulsions, Engineered Emulsions, Tacks, and Fog Seals.

Other Identifiers: All Cationic Emulsions, designated with CQS, CRS, CMS, CSS, MSE, EE, ERA, and dilutes.

Manufacturers Name: Albina Asphalt
Address: 801 Main Street, Vancouver, WA 98660
Emergency phone # 800-535-5053 (Infotrac)
Other Information Calls: 800-888-5048 Product Information

Revision Date Nov 10, 2015

SECTION 2 HAZARD IDENTIFICATION

Classification: Carcinogenicity, Category 2

Label Elements

Hazard
Symbol:

Hazard Statement:
Can cause Eye irritation.
Can cause skin irritation.
May cause respiratory irritation

Precautionary Statement
Avoid breathing fumes and vapors.
Wash hands and skin if it comes in contact.
Wear protective gloves, clothing, eye, and face protection.

Hazards from Exposure.
Acute
EYES Vapors may cause irritation or Redness. Contacted with heated material may cause thermal burns.
SKIN Contact may cause mild skin irritation. Contacted with heated material may cause thermal burns.
INHALATION Vapors from hot material may cause dizziness, headaches, lung irritation, and in enclosed spaces can accumulate and cause possible death.
INGESTION May cause nausea, diarrhea, and vomiting, along with thermal burns of hot material.
CHRONIC Long term exposure to asphalt fumes may cause bronchitis.
**SECTION 3 COMPOSITION AND INFORMATION OF INGREDIENTS**

<table>
<thead>
<tr>
<th>INGREDIENTS</th>
<th>CAS. NO.</th>
<th>WT %</th>
<th>OSHA PEL</th>
<th>STEL</th>
<th>ACGIH TLV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Petroleum Asphalt</td>
<td>8052-42-4</td>
<td>&gt;100%</td>
<td>NE</td>
<td>5 mgm³</td>
<td></td>
</tr>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>25% - 75%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emulsifiers</td>
<td>Proprietary</td>
<td>.1 - 6%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>May Contain one or all of the following.</td>
<td>proprietary</td>
<td>0 - 6%</td>
<td>NE</td>
<td>NE</td>
<td></td>
</tr>
<tr>
<td>Latex</td>
<td>proprietary</td>
<td>0 - 6%</td>
<td>NE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Polymer</td>
<td>proprietary</td>
<td>0 - 8%</td>
<td>NE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proprietary Additives</td>
<td>proprietary</td>
<td>0-5%</td>
<td>NE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hydrogen Sulfide</td>
<td>.7783-06-4</td>
<td>&lt;0.1%</td>
<td>10ppm</td>
<td>15ppm</td>
<td>10ppm</td>
</tr>
</tbody>
</table>

Additional Comments: Though Further Detail On Contents May Be Confidential, All Pertinent Hazards Are Addressed In This SDS.

**SECTION 4 FIRST AID MEASURES**

**INHALATION:** If respiratory system develop remove individual to fresh air and keep comfortable. If breathing remains difficult seek immediate medical attention.

**SKIN CONTACT:** If hot material comes in contact with skin or clothing flush or immerse the area with cold water for 10 minuets. Remove clothing that is not adhering to the skin. Do not remove asphalt or clothing that is adhered to the skin, watch for signs of shock. Seek immediate medical attention.

**EYE CONTACT:** If redness or irritation develops from exposure to fumes, remove individual to fresh air. Flush eyes with cold water if symptoms continue, seek medical attention. If contact is made with hot product flush eyes with cold water for 20 minuets and seek immediate medical attention.

**INGESTION:** If hot product is swallowed, rinse mouth with water and seek immediate medical attention. Do not induce vomiting.

**NOTE TO PHYSICIANS:** Cooled asphalt is not harmful to the skin. It will detach after a few days. If it has to be removed use only medical approved solvents. Most symptoms are acute and can be delayed. These include but are not limited too irritation, redness, swelling, pain, nausea, and blurred vision.

**SECTION 5 - FIRE-FIGHTING MEASURES.**

- **Flash Point:** Not Classified as a Flammable or Combustable material.
- **Flammable limits in air % by volume:** N/D
- **Extinguisher Media:** Dry Chemical, CO2, Halon, Water Spray, or standard foam.

**Fire Fighting Procedures:**
- Move containers from fire area if possible. Cool fire-exposed containers with water from side until well after fire is out. Stay away from storage tank end for massive fire in storage area. Use unmanned hose holder or monitor. Use flooding amounts of water as a fog, as solid streams may cause eruptions.
- Withdraw immediately in case of rising sound from venting safety device or any discoloration of storage vessel due to fire. Extinguish only if flow can be stopped. Water or foam may cause frothing. Avoid breathing toxic vapors and keep upwind.

**Protective Equipment**
- Structural Firefighters should where Self Contained Breathing Apparatus to protect from Corrosive and Toxic vapors. Hydrogen sulfide is heavier than air and will collect in low lying areas.

**ADDITIONAL COMMENTS:** Represents a slight fire hazard when exposed to heat or flame.

**NFPA RATING SYSTEM**

- Flammability
SECTION 6 ACCIDENTAL RELEASE

Personal Precautions, Protective equipment, and Emergency Procedures.

Personal Precaution
Avoid all contact with spilled or released material. Use PPE recommended in section 8 if you must go near the spill. Wear Self Contained Breathing Apparatus. Notify Fire Department and other appropriate Federal, State, and local agencies.

Protective Equipment.
An Emergency wash station to flush eyes as well as body.

Emergency Procedures.
Shut off area ignition sources. Stop leak if it can be done without risk. Stay upwind of possible vapors. For small spills, use absorbent material and place into container. Dike ahead of large spill for later disposal. Prohibit smoking in affected area. Isolate area and restrict entry.

Containment and Cleanup.
Stop spill or release if it can be completed safely. Material will flow. Keep material from flowing into storm drains, sewers, and water ways by covering or diking. Contact the appropriate agency should spilled material get into waterways. Follow appropriate procedure and guidelines to clean up and dispose of spilled material. Dispose of material by Federal, State, and Local Guidelines.

SECTION 7 Handling and Storage.

Handling
Review section 8 for proper PPE before handling product, it is stored and transported at Temperatures between 70°F and 190°F. Thermal burns are a hazard. Do not eat, drink, smoke, or apply make up while handling material. Wash with soap and water after coming in contact with cooled material. Avoid breathing vapors or mist generated by products.

Storage.
Product is usually stored between 70°F and 190°F. Do not use, or store near heat, sparks, or open flames. Hydrogen sulfide maybe present in empty tanks, or transport vessels. Follow confined space entry guidelines if you must enter one of these containers. Ensure containers are free of water or condensation when placing material in container.

Section 8 Exposure Controls/ Personal Protection.

<table>
<thead>
<tr>
<th>Component</th>
<th>ACGIH</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asphalt</td>
<td>0.5 mg/m³ TWA</td>
<td>No PEL Established</td>
</tr>
<tr>
<td>Cas # 8052-42-4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hydrogen Sulfide</td>
<td>1PPM TWA</td>
<td>20 PPM Ceiling</td>
</tr>
<tr>
<td>CAS # 7783-06-4</td>
<td>5PPM STEL</td>
<td></td>
</tr>
</tbody>
</table>

TWA - Time weighted Average
PEL-m Permissible Exposure Limit.
STEL- Short Term Exposure Limit

Engineering Controls
Ensure ventilation equipment can maintain airborne vapor levels below limits listed above.

Personal Protective Equipment. (PPE)
Eye and Face Protection. Wear eye protection and face shield meeting US OSHA 29CFR 1910.133 to protect eyes and face from hot material.
Respiratory Protection. Airborne concentrations need to be maintained below levels listed above. If not, a NIOSH approved air-purifying respirator, with an Organic Vapor cartridge, or a Self Contained Breathing apparatus must be used if oxygen concentrations are low.

Hand Protection. Use chemical resistant gloves to protect skin from contact, to include thermal protection if product is hot. Check with equipment manufacture to ensure compliance.

Body Protection. Full length clothing should be worn to cover exposed skin, and leather shoes.

Personal Hygiene. Do not eat or drink when handling material. Emergency eye wash and Shower Station should be available to cool material if it come in contact with the employee.

Section 9 Physical and Chemical Properties.

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance and Odor</td>
<td>Brown to Black viscous liquid with asphalt odor.</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>Not Available.</td>
</tr>
<tr>
<td>Physical State</td>
<td>Semi Solid at Room Temperature, Viscous Liquid at elevated Temperatures.</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>NA</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>NA</td>
</tr>
<tr>
<td>pH</td>
<td>2.0 to 7.0</td>
</tr>
<tr>
<td>Relative Density</td>
<td>NA</td>
</tr>
<tr>
<td>Solubility</td>
<td>Miscable</td>
</tr>
<tr>
<td>Flash Point</td>
<td>&gt; 94C 200F COC Flash</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Flammability</td>
<td>Not Available.</td>
</tr>
<tr>
<td>Partition Coefficient</td>
<td>Not Available.</td>
</tr>
<tr>
<td>Auto-Ignition Temp</td>
<td>Not Available.</td>
</tr>
<tr>
<td>Decomposition Temp</td>
<td>Not Available.</td>
</tr>
<tr>
<td>Softening Point</td>
<td>Not Available.</td>
</tr>
<tr>
<td>Viscosity</td>
<td>8 SFS to 500 SFS at 122F</td>
</tr>
</tbody>
</table>

Section 10 Stability and Reactivity.

Reactivity Exposure to extreme heat, sources of ignition, and incompatible materials.

Chemical Stability Stable under normal storage conditions.

Hazardous Polymerization Will not Occur.

Incompatible Materials Oxidizers, Acids, and Bases.

Decomposition Hot material may produce Hydrogen Sulfide.

Section 11 Toxicological Information

Possible Exposure Routes Inhalation, Ingestion, Eye Contact, and Skin Contact.

Acute Exposure Toxicity.

<table>
<thead>
<tr>
<th>Route</th>
<th>LD50 Oral</th>
<th>LD50 Dermal</th>
<th>LC 50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral</td>
<td>Not Available</td>
<td>Not Available</td>
<td>Not Available</td>
</tr>
<tr>
<td>Dermal</td>
<td>Not Available</td>
<td>Not Available</td>
<td>Not Available</td>
</tr>
<tr>
<td>Inhalation</td>
<td>Not Available</td>
<td>Not Available</td>
<td>440 ppm (Rat)</td>
</tr>
</tbody>
</table>

Component Toxicity

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS #</th>
<th>LD50 Oral</th>
<th>LD50 Dermal</th>
<th>LC 50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asphalt</td>
<td>8052-42-4</td>
<td>Not Available</td>
<td>Not Available</td>
<td>Not Available</td>
</tr>
<tr>
<td>Hydrogen Sulfide</td>
<td>7783-06-4</td>
<td>Not Available</td>
<td>Not Available</td>
<td>440 ppm (Rat)</td>
</tr>
</tbody>
</table>
Target Organs: Eyes, Lungs, Skin, Respitory System, Blood, Central nervous system

Symptoms

Inhalation Included but not limited to cough, sneezing, nasal discharge, headache, nose, and throat pain. With trace amounts of Hydrogen Sulfide it will produce a rotten egg smell at very low concentrations, 1-5 PPM. As the concentration increases loss of smell, headache, dizziness, nausea, vomiting, and irritation of respiratory tract. Death will occur at concentration of 300 to 450ppm and 1 to 3 hours of exposure.

Eye Hot product will cause thermal burns on contact. Vapor may cause eye irritation, redness, watering eyes, or blurred and hazy vision.

Skin Contact with hot product will cause thermal burns. Fumes may cause swelling and itching.

Ingestion Hot product will cause thermal burns with contact. Can cause nausea, vomiting, diarrhea, constipation, and severe abdominal pain

Skin Sensitization: Not Available.

Respitory Sensitization: Not Available.

Medical Conditions Not Available.

Chronic Effects

Target Organs: Eyes, Lungs, Skin, Respitory System, Blood, Central nervous system

Chronic Effects: Continuous contact may cause skin irritation, redness, and swelling. Hydrogen Sulfide can cause headaches, nausea, vomiting, eye and nasal irritation, and damage to the respiratory system.

Carcinogenicity: There has not been evidence presented by the National Toxicology Program or Occupational Safety and Health Administration that establishes Asphalt as a carcinogen.

Section 12 Ecological Information.

Toxicity Not Available.

Persist or Degrade. Product has a very low rate of biodegration.

Bioaccumulation It is unlikely due to low water solubility.

Environmental movement: Not Available.

Adverse Effects: There is not any evidence available that shows the product effect on Aquatic Life, However, Latex a possible ingredient is harmful to Aquatic Life.

Section 13 Disposal Considerations.

Instructions Dispose of material in according to Federal, State, and local regulations. Must comply with the most stringent guidelines.

Section 14 Transportation Information.

All Grades Transportation.

D.O.T. PROPER SHIPPING NAME (49 CFR 172.101):
Non- Regulated Material

D.O.T. HAZARD CLASS (49 CFR 172.101):
None

UN / NA CODE (49 172.101):
None

PACKAGING GROUP (49 172.101):
BILL OF LADING DESCRIPTION (49 172.101):
None - labeled as emulsified Asphalt

D.O.T. LABELS REQUIRED (49 172.101):
None

D.O.T. PLACARDS REQUIRED (49 172.101):
None

Section 15 Regulatory Information.

US Regulations

SARA Reporting: Product is not subject to the reporting requirements of Section 302, 304, and 313 of Title III of the Superfund Amendments Reauthorization Act.

TSCA: All components in this product are listed on the US Toxic Substance Control Act.

SARA 311/312
Acute Health: Yes  Chronic Health: Yes  Fire: No  Reactivity: NO

Threshold Planning Quantities: No Specific Threshold Planning Quantities for product.

State Regulations
California: Product contains substances known to the State of California to cause Cancer, Birth Defects, or Reproductive harm.

Section 16 Other Information.

Disclaimer:
The information in this document applies to the specific material as it is supplied. If the material is used in combination with another material the document may not apply. The user has the responsibility to satisfy oneself on the usability of the information supplied in this document, and assumes the risk thereof.

Date of SDS 12/10/2015
Prepared by Albina Asphalt