SDS

SAFETY DATA SHEET

BI-STATE EMULSIONS, LLC

Section 1 - Identification

Product indentifier:	**CHFRS-2P, CRS-2, CRS-2P, CSS-1H, CSS-1HP, CPEM-1,CQS-1HP MSE-1, RSP**
Other means of identification:	Cationic emulsion
Recommended use:	Road construction emulsions
Manufacturer:	Bi-State Emulsions, LLC
Address:	3714 Big Bend Industrial Court St. Louis, MO 63143
Telephone:	314-645-1818
Website:	www.missouripetroleum.com/bi-state-emulsions/
Email:	BiStateSDS@bistateemulsions.com
24 Hour Emergency:	**800-633-8253**
Issue Date:	February 11, 2014
Last revision date:	June 12, 2024

Section 2 - Hazard(s) identification

Physical hazards	Not Classified
Health hazards	Not Classified
Environmental hazards	Not Classified
OSHA defined hazards	Not Classified
Label elements	
Hazard symbol	None
Hazard word	None
Hazard statement	Does not meet criteria for this classification
Precautionary statement	
Prevention	Observe good industrial hygiene practices
Response	Wash hands after handling
Storage	Store away from incompatible materials
Disposal	Dispose of waste and residues in accordance with local authority requirements.

Hazard identification

NFPA

Degree of Hazard	Hazard Ratings
Health: 1	**0 = Least**
Fire: 1	**1 = Slight**
Reactivity: 0	**2 = Moderate**
	3 = High
	4 = Extreme

Hazard(s) not otherwise classified (HNOC) None known

Supplemental information Vapors may contain hydrogen sulfide may accumulate during storage or transport. HYDROGEN SULFIDE (H2S) can be harmful if inhaled.

Section 3 - Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Asphalt		8052-42-4	25-75
Water		7732-18-5	25-75
Emulsifiers		Proprietary	0.1-6
	May contain one or more of the following		
Polymer or Latex		Proprietary	0-5
Diluent		Proprietary	0-10
Hydrogen Sulfide		7783-06-4	<0 .1

Section 4 - First-aid measures

Inhalation If breathing is difficult, seek fresh air and keep at rest in a position comfortable for breathing. Seek medical attention if symptoms persist.

Skin Contact Wash with cool water for mild irritation. If there is a thermal burn, immediately, place the affected skin under running water for at least 20 minutes - DO NOT DELAY. Prolonged flushing and cooling is necessary. Ice (or “cold packs”) may be used in the event that water is unavailable. Do not attempt to remove the emulsion. Do not place any sheets or towels on top of the emulsion due to the risk of adhesion. Get immediate medical attention.

Eye Contact Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. In the case of irritated eyes from fumes, flush with cool water. If the irritation persists, seek medical assistance.

Ingestion DO NOT ingest asphalt emulsions. Rinse mouth. DO NOT induce vomiting. Get medical attention immediately.

Most important symptoms/effects, acute and delayed Not available

Section 5 - Fire fighting measures

Suitable extinguishing media	Foam. Dry chemical powder. Carbon dioxide (CO2)
Unsuitable extinguishing media	Do not use a solid water stream as it may scatter and spread fire.
Specific hazards arising from the chemical	Not applicable
Special protective equipment and precautions for firefighters	Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA. Structural firefighters protective clothing will only provide limited protection.
Fire fighting equipment/instructions	ALWAYS stay away from tanks engulfed in flame. Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. Move containers from fire area if you can do so without risk. In the event of fire, cool tanks with water spray. Use of foam or water may cause frothing.
Specific methods	In the event of fire and/or explosion do not breathe fumes. In the event of fire, cool tanks with water spray.
General fire hazards	No unusual fire or explosion hazards noted.

Section 6 - Accidental release measures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Ventilate closed spaces before entering them. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
Proper methods of containment & cleanup	Dike far ahead of spill for later disposal. Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers. Ventilate area and avoid breathing vapors or mist. For large spills, dike far ahead of liquid spill for later disposal. Do not release into sewers or waterways.
Enivornmental precautions	Not availabe

Section 7 - Handling and storage

Precautions for safe handling	Avoid prolonged exposure. Use only in well-ventilated areas. Hydrogen sulfide, a very highly toxic gas, may be present with this material. Keep face clear of tank and/or tank car openings. Do not add water to hot product. This may result in frothing of the mixture causing hot asphalt to overflow the container. Wash hands and contaminated areas with water and soap before leaving the work site. Always take the proper precautions to ensure you and the people around are safe. Use proper control measures. while working with these products. Store in properly closed containers that are correctly labeled and located in a well-ventilated area. Normal storage temperatures for these products are anywhere between 50°F and 150°F. If these products are stored above or below these temperatures, it can cause degradation to the product. These products can produce harmful hydrogen sulfide (H2S) gases that can become trapped in the open cavities of the

tanks/vessels used to hold the product. Before entering any tank/vessel carrying these products, it should first be determined if there is a presence of (H2S). When opening tanks/vessels carrying these products, always use eye (face shield) protection, and heat resistant gloves. Tanks/Vessels can become pressurized, so take precautions opening manway covers, valves and lids. When storing these products in tanks that have heating options, make sure that all flues and/or heating coils are covered with at least 8" of asphalt emulsion. Do not overheat these products, doing so can be hazardous. The distributor shall have the full circulating and heating capabilities in the tank. If the particle charge of the emulsion is different from the particle charge of the emulsion that was previously used, then the tank shall be thoroughly cleaned prior to use since some products are not compatible. Do not apply heat while distributor is transporting emulsion.

Conditions for safe handling and storage, including incompatiblities

Prevent electrostatic charge build-up by using common bonding and grounding techniques. Store in a well-ventilated place. Do not allow allow material to freeze.

Section 8 - Exposure controls/personal protection

Occupational exposure limits

Chemical name	CAS#	ACGIH TWA	OSHA TWA	NIOSH
Asphalt	8052-42-4	0.5 mg/m3	NOT LISTED	0.5 mg/m3
Hydrogen Sulfide	7783-06-4	1 PPM TWA	20 PPM CEILING	10 PPM

The ACGIH TLV is 0.5 mg/m3 as the benzene extractable portion of the inhalable fraction of asphalt fume. The TLV may also be determined by unspecified "equivalent" methods. Currently, international exposure limits are not established for all of the components of this product. Please check with competent authority in each country for the most recent limits in place. in place.

U.S.OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
Asphalt (CAS 8052-42-4)	Ceiling	0.5 mg/m3	Inhalable fume
Hydrogen Sulfide (CAS 7783-06-4)	Ceiling	20	

Biological limit values

No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls

Provide adequate ventilation, including appropriate local extraction, to ensure that the defined occupational exposure limit is not exceeded.

Individual protection measures, such as personal protective equipment

Eye/face protection

Wear Safety glasses. Wear face shield if there is risk of splashes.

Skin/Hand/body protection

Thermally protective, chemical resistant gloves are recommended. If contact with forearms is likely, wear gauntlet style gloves. Long sleeved shirts, long pants, and boots are recommended. Wear 100% cotton clothing.

Respiratory protection

When workers are facing concentrations above the exposure limit, they must use appropriate certified respirators.

Thermal hazards	Wear appropriate thermal protective clothing, when necessary.
General hygiene considerations	Always observe good personal hygiene measures, such as washing after handling the material before eating, drinking, or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

Section 9 - Physical and chemical properties

Appearance	Brown to black in color
Physical state	Viscous liquid
Form	Semi-solid at ambient temperature
Odor	Tar-like
Odor threshold	Mild
pH	2-7.0
Melting point	150 - 180°F
Initial boiling point and boiling range	>= 212 °F (>= 100 °C)
Flash point	>212 °F
Evaporation rate	<1
Flammability (solid, gas)	Not available
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	Not available
Flammability limit - upper (%)	Not available
Explosive limit - lower (%)	Not available
Explosive limit - upper (%)	Not available
Vapor pressure	< 1 mm Hg at 70C
Vapor density	> 1
Relative density	Not available
Solubility(ies) Solubility (water)	Miscible
Partition coefficient (n-octanol/water)	Not available
Auto-ignition temperature	> 700 °F (> 371.11 °C)
Decomposition temperature	Not available
Viscosity	Variable
Other information	
Specific gravity	0.98 - 1.15

Section 10 - Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage, and transport.
Chemical stability	Stable under normal temperature conditions
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Conditions to avoid	Avoid heating in excess of 185° F and contact with incompatible materials. Avoid allowing the material to cool below 50°F.
Incompatible materials	These products should not be mixed with anionic asphalt emulsions or asphalt that has not been emulsified. These products could react negatively

	with strong oxidizing agents, including but not limited to chlorates, nitrates and peroxides
Hazardous decomposition products	Upon decomposition, this product may yield hydrogen sulfide, sulfur dioxide, carbon monoxide, carbon dioxide, and/or low molecular weight hydrocarbons.

Section 11 - Toxicological information

Information on likely routes of exposure

Inhalation	Prolonged inhalation may be harmful.
Skin contact	No adverse effects due to skin contact are expected.
Eye contact	Harmful in contact with eyes.
Ingestion	Expecting to be a low ingestion hazard.

Symptoms related to the physical, chemical and toxicological characteristics	Direct contact with eyes may cause temporary irritation.
Information on toxicological effects	
Acute toxicity	Not available
Skin corrosion/irritation	Prolonged skin contact may cause temporary irritation.
Serious eye damage/eye irritation	Harmful in contact with eyes
Respiratory or skin sensitization	
Respiratory sensitization	May cause irritation
Skin sensitization	May cause irritation
Germ cell mutagenicity	Not available
Carcinogenicity	This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

IARC Monographs. Overall Evaluation of Carcinogenicity

ASPHALT (CAS 8052-42-4)	2B Possibly carcinogenic to humans

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

Not regulated

US. National Toxicology Program (NTP) Report on Carcinogens

Not listed

Reproductive toxicity	Not classified
Specific target organ toxicity	Not classified
Aspiration hazard	Not available
Chronic effects	Prolonged exposure may cause chronic effects.

Section 12 - Ecological information

Environmental stability	These products show no significant signs of adverse effects on the environment.
Effects of material on plants or animals	At this point in time, there is no evidence that the product effects plants and animals.
Effects of product on aquatic life	There is no current evidence on these products effect aquatic life. Latex however, found in some of the products listed has been listed has been found aquatic life.

Section 13 - Disposal considerations

Disposal instructions	These products are not classified as hazardous materials under U.S. DOT, Canadian TDG regulations, EU Member States, Japan or Australia. However, you should only dispose of these products in accordance to federal, state, providential or local standards.
Waste from residues/unused products	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner. Avoid discharge into water courses or onto the ground.
Contaminated packaging	Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

Section 14 - Transport information

DOT	Not regulated as dangerous goods.
IATA	Not regulated as dangerous goods.
IMDG	Not regulated as dangerous goods.

These products are non-regulated by the U.S. Department Of Transportation(DOT), Transport Canada, International Air Transport Association (IATA), International Maritime Organization and the European Agreement Concerning the International Carriage of Dangerous Goods by Road (ADR). They do not require DOT labels, packing group or UN Identification Number. These products have not been assigned a Hazard Class Number or North American Emergency Response Guidebook Number. None of these products(s) ingredient(s) have been classified by the DOT as a marine pollutant.

Section 15 - Regulatory information

TSCA	All components are listed on the US Toxic Substances Control Act (TSCA) inventory of chemicals.
SARA reporting requirements	These products are not subject to the reporting requirements of section 302, 304 and 313 of Title III of the Superfund Amendments and reauthorization act,as follows: THIS PRODUCT IS SUBJECT TO TIER II REPORTING REQUIREMENTS.
SARA 311/312	Acute Health: yes Chronic health : yes Fire: no Reactivity: no

U.S. SARA Threshold planning quantity	There are no known Threshold Planning Quantities for these products. The default Federal SDS submission and inventory requirement filing threshold of 10,000 lbs. may apply, per 40 CFR 370.20
California safe drinking water and toxic enforcement act (PROPOSITION 65)	These products contain ingredients found in the California Proposition 65 lists.
Attention:	THESE PRODUCTS MAY CONTAIN AN INGREDIENT THAT IS KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER.
U.S. CERCLA REPORTABLE QUANTITY (rq)	None
CANADIAN ENVIRONMENTAL PROTECTION ACT (CEPA) PRIORITIES SUBSTANCES LISTS:	There are no components of these products on the CEPA First Priorities Substance Lists.
CANADIAN WHMIS CLASSIFICATION	These products are categorized as Class D Division 2B Materials causing other toxic effects as per the Controlled Product Regulations.
CANADIAN DSL/NDSL INVENTORY STATUS	All products and components of products are found on the DSL inventory list.

Section 16 - Other information, including date of preparation or last revision

Issue date	2/11/2014
Revision date	6/12/2024
Version #	3

Disclaimer: The information contained herein is based on the data available to us and is believed to be correct. However, Bi-State Emulsions, LLC makes no warranty, expressed or implied regarding the accuracy of this data or the results to be obtained from the use thereof. This information and product is furnished on the condition that the person receiving it shall make their own determination as to the suitability of the product for their particular purpose and on the condition that they assume the risk of use thereof.