

## SECTION 1: IDENTIFICATION

### 1.1. Product Identifier

**Product Form:** Mixture

**Product Name:** Cationic Asphalt Emulsion

**Synonyms:** Cationic Asphalt Emulsion

**Other means of identification:** CSS-1, CSS-1H, CSS-1HM, CSS-1HH, CQS-1H, CQS-1F, CSS-1P, CRS-1H, CRS-2, CRS-2S, CRS-2P, CHFRS-2P, CMS-1, CMS-2, CMS-2H, CRS-1HP, CRS-1HM, EBL, NOVABOND, PMCRS-1S, PMCSS-1H, PMCRS-2S, Tack Oil, RoadTac

### 1.2. Intended Use of the Product

**Use of the substance/mixture:** Construction

### 1.3. Name, Address, and Telephone of the Responsible Party

#### Company

Vance Brothers

5201 Brighton Ave., P.O. Box 300107

Kansas City, MO 64130

T 816-923-4325/ 800-821-8549 - F 816-923-6472

### 1.4. Emergency Telephone Number

**Emergency Number** : 800-424-9300 (CHEMTREC)

## SECTION 2: HAZARDS IDENTIFICATION

### 2.1. Classification of the Substance or Mixture

#### GHS-US classification

Skin Irrit. 2 H315

Carc. 2 H351

STOT RE 2 H373

Asp. Tox. 1 H304

Aquatic Acute 3 H402

Aquatic Chronic 2 H411

Full text of H-phrases: see section 16

### 2.2. Label Elements

#### GHS-US Labeling

##### Hazard Pictograms (GHS-US)



##### Signal Word (GHS-US)

: Danger

##### Hazard Statements (GHS-US)

: H304 - May be fatal if swallowed and enters airways.

H315 - Causes skin irritation.

H351 - Suspected of causing cancer.

H373 - May cause damage to organs through prolonged or repeated exposure.

H402 - Harmful to aquatic life.

H411 - Toxic to aquatic life with long lasting effects.

##### 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 vapors, mist, spray.

P264 - Wash hands, forearms, and exposed areas thoroughly after handling.

P273 - Avoid release to the environment.

P280 - Wear eye protection, face shield, protective clothing, protective gloves.

P301+P310 - If swallowed: Immediately call a POISON CENTER, a doctor.

P302+P352 - If on skin: Wash with plenty of water.

P308+P313 - If exposed or concerned: Get medical advice/attention.

P314 - Get medical advice/attention if you feel unwell.

P321 - Specific treatment (see Section 4 on this SDS).

P331 - Do NOT induce vomiting.

P332+P313 - If skin irritation occurs: Get medical advice/attention.

P362+P364 - Take off contaminated clothing and wash it before reuse.

P391 - Collect spillage.

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P405 - Store locked up.

P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations.

**2.3. Other Hazards** Exposure may aggravate pre-existing eye, skin, or respiratory conditions. If stored under heat for extended periods or significantly agitated, this material might evolve or release hydrogen sulfide, a flammable gas, which can raise and widen this material's actual flammability limits and significantly lower its auto-ignition temperature. Hydrogen sulfide is a toxic gas that can be fatal. It also has a rotten egg smell that causes odor fatigue very quickly and shouldn't be used as an indicator for the presence of gas. Flammable vapors can accumulate in head space of closed systems.

### 2.4. Unknown Acute Toxicity (GHS-US)

10 percent of the mixture consists of ingredient(s) of unknown acute toxicity.

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1. Substance

Not applicable

### 3.2. Mixture

Name	Product Identifier	%	GHS-US classification
Asphalt	(CAS No) 8052-42-4	45 - 70	Carc. 2, H351
Water	(CAS No) 7732-18-5	30 - 55	Not classified
Proprietary Petroleum Distillate	Proprietary*	< 30	Flam. Liq. 3, H226 Acute Tox. 4 (Inhalation:dust,mist), H332 Skin Irrit. 2, H315 Carc. 2, H351 STOT RE 2, H373 Asp. Tox. 1, H304 Aquatic Acute 3, H402 Aquatic Chronic 2, H411

\*The specific chemical identity and/or exact percentage of composition have been withheld as a trade secret within the meaning of the OSHA Hazard Communication Standard [29 CFR 1910.1200].

Full text of H-phrases: see section 16

## SECTION 4: FIRST AID MEASURES

### 4.1. Description of First Aid Measures

**First-aid Measures General:** 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:** When symptoms occur: go into open air and ventilate suspected area. Obtain medical attention if breathing difficulty persists.

**First-aid Measures After Skin Contact:** Remove contaminated clothing. Immediately flush skin with plenty of water for at least 60 minutes. Get immediate medical advice/attention. Wash contaminated clothing before reuse. In molten form: Cool skin rapidly with cold water after contact with molten product, Removal of solidified molten material from skin requires medical assistance.

**First-aid Measures After Eye Contact:** Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical advice/attention. In molten form: Protect skin and eyes from contact with molten material.

**First-aid Measures After Ingestion:** DO NOT INDUCE VOMITING. Do not give liquids. Obtain immediate medical attention. If spontaneous vomiting occurs, lean victim forward to reduce the risk of aspiration. Small amounts of material which enter the mouth should be rinsed out until the taste is dissipated.

### 4.2. Most important symptoms and effects, both acute and delayed

**Symptoms/Injuries:** Causes skin irritation. May cause an allergic skin reaction. There are potential chronic health effects to consider. Risk of thermal burns on contact with molten product.

**Symptoms/Injuries After Inhalation:** May cause respiratory irritation.

**Symptoms/Injuries After Skin Contact:** Redness, pain, swelling, itching, burning, dryness, and dermatitis. May cause an allergic skin reaction.

**Symptoms/Injuries After Eye Contact:** May cause eye irritation.

**Symptoms/Injuries After Ingestion:** The major health threat of ingestion occurs from the danger of aspiration (breathing) of liquid drops into the lungs, particularly from vomiting. Aspiration may result in chemical pneumonia (fluid in the lungs), severe lung damage, respiratory failure and even death.

**Chronic Symptoms:** May cause damage to organs through prolonged or repeated exposure. Suspected of causing cancer.

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## 4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

If you feel unwell, seek medical advice.

## SECTION 5: FIRE-FIGHTING MEASURES

### 5.1. Extinguishing Media

**Suitable Extinguishing Media:** Dry chemical powder, alcohol-resistant foam, carbon dioxide (CO<sub>2</sub>).

**Unsuitable Extinguishing Media:** Do not use a heavy water stream. Use of heavy stream of water may spread fire. Do not use water when molten material is involved, contact of hot product with water will result in a violent expansion as the water turns to steam causing explosion with massive force.

### 5.2. Special Hazards Arising From the Substance or Mixture

**Fire Hazard:** Not flammable. Will not support combustion unless the water has evaporated.

**Explosion Hazard:** Product is not explosive.

**Reactivity:** Hazardous reactions will not occur under normal conditions.

### 5.3. Advice for Firefighters

**Precautionary Measures Fire:** Exercise caution when fighting any chemical fire.

**Firefighting Instructions:** Do not allow run-off from fire fighting to enter drains or water sources. Do not breathe fumes or vapors from fire. Use water spray or fog for cooling exposed containers.

**Protection During Firefighting:** Do not enter fire area without proper protective equipment, including respiratory protection.

**Other Information:** Refer to Section 9 for flammability properties.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

### 6.1. Personal Precautions, Protective Equipment and Emergency Procedures

**General Measures:** Avoid all eyes and skin contact and do not breathe vapor and mist.

#### 6.1.1. For Non-emergency Personnel

**Protective Equipment:** Use appropriate personal protection equipment (PPE).

**Emergency Procedures:** Evacuate unnecessary personnel.

#### 6.1.2. For Emergency Responders

**Protective Equipment:** Equip cleanup crew with proper protection.

**Emergency Procedures:** Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit.

### 6.2. Environmental Precautions

Prevent entry to sewers and public waters.

### 6.3. Methods and Material for Containment and Cleaning Up

**For Containment:** Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

**Methods for Cleaning Up:** Clean up spills immediately and dispose of waste safely. Absorb and/or contain spill with inert material, then place in suitable container. Contact competent authorities after a spill.

### 6.4. Reference to Other Sections

See Section 8, Exposure Controls and Personal Protection. Concerning disposal elimination after cleaning, see item 13.

## SECTION 7: HANDLING AND STORAGE

### 7.1. Precautions for Safe Handling

**Precautions for Safe Handling:** Avoid breathing vapors, mist, spray. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.

**Hygiene Measures:** Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and again when leaving work. Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse.

### 7.2. Conditions for Safe Storage, Including Any Incompatibilities

**Technical Measures:** Keep from freezing.

**Storage Conditions:** Store in a dry, cool and well-ventilated place. Keep container closed when not in use.

**Incompatible Products:** Strong acids. Strong bases. Strong oxidizers.

**Storage Area:** Store locked up.

### 7.3. Specific End Use(s)

Construction

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1. Control Parameters

For substances listed in section 3 that are not listed here, there are no established exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), AIHA (WEEL), NIOSH (REL), or OSHA (PEL).

Asphalt (8052-42-4)		
USA ACGIH	ACGIH TWA (mg/m <sup>3</sup> )	0.5 mg/m <sup>3</sup> (fume, inhalable fraction)

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<b>USA ACGIH</b>	ACGIH chemical category	Not Classifiable as a Human Carcinogen fume, coal tar-free
<b>USA ACGIH</b>	Biological Exposure Indices (BEI)	(Medium: urine - Time: end of shift at end of workweek - Parameter: 1-Hydroxypyrene with hydrolysis (nonquantitative))
<b>USA NIOSH</b>	NIOSH REL (ceiling) (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup> (fume)
<b>Proprietary Petroleum Distillate</b>		
<b>USA ACGIH</b>	ACGIH TWA (mg/m <sup>3</sup> )	100 mg/m <sup>3</sup> (inhalable fraction and vapor)
<b>USA ACGIH</b>	ACGIH chemical category	Skin - potential significant contribution to overall exposure by the cutaneous route, Confirmed Animal Carcinogen with Unknown Relevance to Humans

## 8.2. Exposure Controls

### Appropriate Engineering Controls

: Emergency eye wash fountains should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed.

### Personal Protective Equipment

: Protective goggles. Gloves. Protective clothing. Insufficient ventilation: wear respiratory protection.



### Materials for Protective Clothing

: Chemically resistant materials and fabrics.

### Hand Protection

: Wear chemically resistant protective gloves.

### Eye Protection

: Chemical safety goggles.

### Skin and Body Protection

: Wear suitable protective clothing.

### Respiratory Protection

: If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn.

### Thermal Hazard Protection

: If material is hot, wear thermally resistant protective gloves.

### Environmental Exposure Controls

: Do not allow the product to be released into the environment.

### Other Information

: When using, do not eat, drink or smoke.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1. Information on Basic Physical and Chemical Properties

Physical State	: Liquid
Appearance	: Brown to Black Material
Odor	: No data available
Odor Threshold	: No data available
pH	: No data available
Evaporation Rate	: Slower (Butyl Acetate=1)
Melting Point	: N/A
Freezing Point	: No data available
Boiling Point	: 100 °C (212 °F)
Flash Point	: > 212 °F (100 °C)
Auto-ignition Temperature	: Not applicable
Decomposition Temperature	: No data available
Flammability (solid, gas)	: No data available
Vapor Pressure	: Not determined
Relative Vapor Density at 20 °C	: > 1 (air=1)
Specific Gravity	: 1 (+/- 0.2 at 60 °F/15.56 °C)
Solubility	: Water: Miscible
Partition Coefficient: N-Octanol/Water	: No data available
Viscosity	: No data available
Lower Flammable Limit	: Unknown
Upper Flammable Limit	: Unknown

### 9.2. Other Information

VOC content : 30 - 55 %

## SECTION 10: STABILITY AND REACTIVITY

10.1. **Reactivity:** Hazardous reactions will not occur under normal conditions.

10.2. **Chemical Stability:** Stable under recommended handling and storage conditions (see section 7).

10.3. **Possibility of Hazardous Reactions:** Hazardous polymerization will not occur.

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**10.4. Conditions to Avoid:** Direct sunlight. Extremely high or low temperatures. Open flame. Overheating. Heat. Sparks.

**10.5. Incompatible Materials:** Strong acids. Strong bases. Strong oxidizers.

**10.6. Hazardous Decomposition Products:** May release flammable gases. Thermal decomposition generates : Hydrogen sulfide. Sulfur dioxide. Corrosive vapors.

## SECTION 11: TOXICOLOGICAL INFORMATION

### 11.1. Information On Toxicological Effects

**Acute Toxicity:** Not classified

Asphalt (8052-42-4)	
LD50 Oral Rat	> 5000 mg/kg
LD50 Dermal Rabbit	> 2000 mg/kg
LC50 Inhalation Rat	> 94.4 mg/m <sup>3</sup>
Proprietary Petroleum Distillate	
LD50 Oral Rat	18.7 - 24.9 ml/kg
LD50 Dermal Rabbit	> 4300 mg/kg
LC50 Inhalation Rat	3.6 mg/l/4h

**Skin Corrosion/Irritation:** Causes skin irritation.

**Serious Eye Damage/Irritation:** Not classified

**Respiratory or Skin Sensitization:** Not classified

**Germ Cell Mutagenicity:** Not classified

**Carcinogenicity:** Suspected of causing cancer.

Asphalt (8052-42-4)	
IARC group	2B
National Toxicology Program (NTP) Status	Twelfth Report - Items under consideration.
OSHA Hazard Communication Carcinogen List	In OSHA Hazard Communication Carcinogen list.

**Reproductive Toxicity:** Not classified

**Specific Target Organ Toxicity (Single Exposure):** Not classified

**Specific Target Organ Toxicity (Repeated Exposure):** May cause damage to organs through prolonged or repeated exposure.

**Aspiration Hazard:** May be fatal if swallowed and enters airways.

**Symptoms/Injuries After Inhalation:** May cause respiratory irritation.

**Symptoms/Injuries After Skin Contact:** Redness, pain, swelling, itching, burning, dryness, and dermatitis. May cause an allergic skin reaction.

**Symptoms/Injuries After Eye Contact:** May cause eye irritation.

**Symptoms/Injuries After Ingestion:** The major health threat of ingestion occurs from the danger of aspiration(breathing) of liquid drops into the lungs, particularly from vomiting. Aspiration may result in chemical pneumonia (fluid in the lungs), severe lung damage, respiratory failure and even death.

**Chronic Symptoms:** May cause damage to organs through prolonged or repeated exposure. Suspected of causing cancer.

## SECTION 12: ECOLOGICAL INFORMATION

### 12.1. Toxicity

**Ecology - General** : Harmful to aquatic life. Toxic to aquatic life with long lasting effects.

Proprietary Petroleum Distillate	
LC50 Fish 1	57 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])

**12.2. Persistence and Degradability** Not established

### 12.3. Bioaccumulative Potential

Asphalt (8052-42-4)	
BCF fish 1	(no bioaccumulation expected)
Log Pow	> 6

**12.4. Mobility in Soil** No additional information available

### 12.5. Other Adverse Effects

**Other Information** : Avoid release to the environment.

## SECTION 13: DISPOSAL CONSIDERATIONS

### 13.1. Waste treatment methods

**Sewage Disposal Recommendations:** Do not empty into drains. Do not dispose of waste into sewer.

**Waste Disposal Recommendations:** Dispose of waste material in accordance with all local, regional, national, and international regulations.

**Additional Information:** Handle empty containers with care because residual vapors are flammable.

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## SECTION 14: TRANSPORT INFORMATION

### 14.1. In Accordance with DOT

Marine Pollutant : Marine pollutant

### 14.2. In Accordance with IMDG

Marine Pollutant : Marine pollutant

14.3. In Accordance with IATA Not regulated for transport

## SECTION 15: REGULATORY INFORMATION

### 15.1 US Federal Regulations

<b>Cationic Asphalt Emulsion</b>	
<b>SARA Section 311/312 Hazard Classes</b>	Immediate (acute) health hazard Delayed (chronic) health hazard
<b>Asphalt (8052-42-4)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
<b>SARA Section 311/312 Hazard Classes</b>	Delayed (chronic) health hazard
<b>Proprietary Petroleum Distillate</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	

### 15.2 US State Regulations

<b>Asphalt (8052-42-4)</b>	
U.S. - Massachusetts - Right To Know List	
U.S. - New Jersey - Right to Know Hazardous Substance List	
U.S. - Pennsylvania - RTK (Right to Know) List	

## SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Revision Date : 10/28/2015

Other Information : This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

### GHS Full Text Phrases:

Acute Tox. 4 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 4
Aquatic Acute 3	Hazardous to the aquatic environment - Acute Hazard Category 3
Aquatic Chronic 2	Hazardous to the aquatic environment - Chronic Hazard Category 2
Asp. Tox. 1	Aspiration hazard Category 1
Carc. 2	Carcinogenicity Category 2
Flam. Liq. 3	Flammable liquids Category 3
Skin Irrit. 2	Skin corrosion/irritation Category 2
STOT RE 2	Specific target organ toxicity (repeated exposure) Category 2
H226	Flammable liquid and vapor
H304	May be fatal if swallowed and enters airways
H315	Causes skin irritation
H332	Harmful if inhaled
H351	Suspected of causing cancer
H373	May cause damage to organs through prolonged or repeated exposure
H402	Harmful to aquatic life
H411	Toxic to aquatic life with long lasting effects

### NFPA Health Hazard

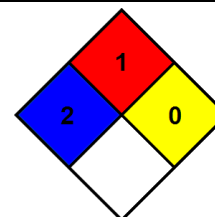
: 2 - Intense or continued exposure could cause temporary incapacitation or possible residual injury unless prompt medical attention is given.

### NFPA Fire Hazard

: 1 - Must be preheated before ignition can occur.

### NFPA Reactivity

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



*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.*

SDS US (GHS HazCom)