

# Material Safety Data Sheet

## SECTION 1 PRODUCT AND COMPANY IDENTIFICATION

### CHEVRON Asphalt Emulsions - Cationic CSS/CRS

**Product Number(s):**

CPS290027, CPS291097, CPS291112, CPS291127, CPS291131, CPS291132, CPS291134, CPS291196, CPS291571, CPS291572, CPS292519, CPS293220, CPS293225, CPS293226, CPS294573, CPS294826, CPS294847

**Synonyms:** CHEVRON Asphalt Emulsion CRS-1, CHEVRON Asphalt Emulsion CRS-2, CHEVRON Asphalt Emulsion CRS-2 ADOT, CHEVRON Asphalt Emulsion CRS-2/CRS-2L (P3), CHEVRON Asphalt Emulsion CRS-2H, CHEVRON Asphalt Emulsion CRS-2P, CHEVRON Asphalt Emulsion CSS-1, CHEVRON Asphalt Emulsion CSS-1H, CHEVRON Asphalt Emulsion Dilute CSS-1, CHEVRON Asphalt Emulsion S.T.E.-1, CHEVRON Emulsion CRS-2K TS

**Company Identification**

Chevron Products Company  
Marketing, MSDS Coordinator  
6001 Bollinger Canyon Road  
San Ramon, CA 94583  
United States of America

**Transportation Emergency Response**

CHEMTREC: (800) 424-9300 or (703) 527-3887

**Health Emergency**

ChevronTexaco Emergency Information Center: Located in the USA. International collect calls accepted. (800) 231-0623 or (510) 231-0623

**Product Information**

MSDS Requests: (800) 689-3998

**SPECIAL NOTES:** This is a generic MSDS for Chevron Asphalt Emulsions - Cationic CSS/CRS. The health hazards for all Chevron AE - Cationic CSS/CRS are described in this MSDS.

## SECTION 2 COMPOSITION/ INFORMATION ON INGREDIENTS

COMPONENTS	CAS NUMBER	AMOUNT
CHEVRON Asphalt Emulsions - Cationic CSS/CRS		100 %weight

Asphalt	8052-42-4	< 67 %weight
Water	7732-18-5	< 45 %weight
Naphtha, light straight run	64741-46-4	0 - 6 %weight
Copolymers	Proprietary	4 %weight
Alkylamine hydrochloride	Proprietary	< 1 %weight
Additives	Proprietary	< 2 %weight

### SECTION 3 HAZARDS IDENTIFICATION

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#### EMERGENCY OVERVIEW

- MAY EMIT COMBUSTIBLE HYDROCARBON VAPORS
  - PROLONGED OR REPEATED BREATHING OF FUMES OR VAPORS OR CONTACT WITH SKIN CAN BE HARMFUL
  - CAUSES EYE IRRITATION
  - CAUSES SKIN IRRITATION
  - KEEP OUT OF REACH OF CHILDREN
- \*\*\*\*\*

#### IMMEDIATE HEALTH EFFECTS

**Eye:** Contact with the eyes causes irritation. Symptoms may include pain, tearing, reddening, swelling and impaired vision. If this material is heated, thermal burns may result from eye contact.

**Skin:** Contact with the skin causes irritation. Symptoms may include pain, itching, discoloration, swelling, and blistering. Not expected to be harmful to internal organs if absorbed through the skin. If this material is heated, thermal burns may result from skin contact.

**Ingestion:** May be irritating to mouth, throat, and stomach. Symptoms may include pain, nausea, vomiting, and diarrhea.

**Inhalation:** Excessive or prolonged breathing of this material may cause central nervous system effects. Central nervous system effects may include headache, dizziness, nausea, vomiting, weakness, loss of coordination, blurred vision, drowsiness, confusion, or disorientation. At extreme exposures, central nervous system effects may include respiratory depression, tremors or convulsions, loss of consciousness, coma or death.

#### DELAYED OR OTHER HEALTH EFFECTS:

**Cancer:** May cause cancer in laboratory animals, but the available information is inadequate to determine if this material can cause cancer in humans.

Risk depends on duration and level of exposure. See Section 11 for additional information.

## SECTION 4 FIRST AID MEASURES

**Eye:** Flush eyes with water immediately while holding the eyelids open. Remove contact lenses, if worn, after initial flushing, and continue flushing for at least 15 minutes. Get medical attention if irritation persists. If heated material should splash into eyes, flush eyes immediately with fresh water for 15 minutes while holding the eyelids open. Remove contact lenses, if worn. Get immediate medical attention.

**Skin:** Wash skin with water immediately and remove contaminated clothing and shoes. Get medical attention if any symptoms develop. To remove the material from skin, apply a waterless hand cleaner, mineral oil, or petroleum jelly. Then wash with soap and water. Discard contaminated clothing and shoes or thoroughly clean before reuse. If the hot material gets on skin, quickly cool in water. See a doctor for extensive burns. Do not try to peel the solidified material from the skin, or use solvents or thinners to dissolve it. The use of vegetable oil or mineral oil is recommended for removal of this material from the skin.

**Ingestion:** If swallowed, get medical attention. Do not induce vomiting. Never give anything by mouth to an unconscious person.

**Inhalation:** Move the exposed person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention if breathing difficulties continue.

## SECTION 5 FIRE FIGHTING MEASURES

### FIRE CLASSIFICATION:

OSHA Classification (29 CFR 1910.1200): Not classified by OSHA as flammable or combustible.

**NFPA RATINGS:** Health: 0      Flammability: 1      Reactivity: 0

### FLAMMABLE PROPERTIES:

**Flashpoint:** NA

**Autoignition:** NA

**Flammability (Explosive) Limits (% by volume in air):** Lower: NA Upper: NA

**EXTINGUISHING MEDIA:** Use water fog, foam, dry chemical or carbon dioxide (CO<sub>2</sub>) to extinguish flames.

### PROTECTION OF FIRE FIGHTERS:

**Fire Fighting Instructions:** This product is an emulsion containing asphalt and petroleum distillate(s) dispersed in water. Tests on these emulsions may indicate no flash up to 212F where water boils and the test is terminated. The distillate(s), however, can separate from the emulsion, float to the surface, vaporize, and thereby create a hazard. This material normally will not burn. However, dehydrated residue will burn. For fires involving this material, do not enter any enclosed or confined fire space without proper protective equipment, including self-contained breathing apparatus.

**Combustion Products:** Highly dependent on combustion conditions. A complex mixture of airborne solids, liquids, and gases including carbon monoxide, carbon dioxide, and unidentified organic compounds will be evolved when this material undergoes combustion. Combustion may form oxides of: Sulfur.

## SECTION 6 ACCIDENTAL RELEASE MEASURES

**Protective Measures:** Eliminate all sources of ignition in vicinity of spilled material.

**Spill Management:** Stop the source of the release if you can do it without risk. Contain release to prevent further contamination of soil, surface water or groundwater. Clean up spill as soon as possible, observing precautions in Exposure Controls/Personal Protection. Use appropriate techniques such as applying non-combustible absorbent materials or pumping. Where feasible and appropriate, remove contaminated soil. Place contaminated materials in disposable containers and dispose of in a manner consistent with applicable regulations. If heated material is spilled, allow it to cool before proceeding with disposal methods.

**Reporting:** Report spills to local authorities and/or the U.S. Coast Guard's National Response Center at (800) 424-8802 as appropriate or required.

## SECTION 7 HANDLING AND STORAGE

**Precautionary Measures:** Do not use or store near heat, sparks, or open flames. Use or store only in a well-ventilated area. Keep container closed when material is not in use.

Do not heat above 200F (93.3C) or product degradation may occur. Avoid freezing.

This material is usually stored at elevated temperatures. Hydrocarbon vapor may accumulate in the headspace of storage containers and may reach flammable concentrations. If flammable concentrations are found to be frequent or continuous, appropriate precautions should be taken to avoid explosion.

Do not get in eyes, on skin, or on clothing. Do not breathe vapor or fumes. Do not taste or swallow. Wash thoroughly after handling. Smoking, eating and drinking, etc. should be prohibited when skin contact with the product or fume condensate is possible. Workers should clean hands and face before smoking, eating and drinking, etc. Do not use solvents to clean hands and face. Use vegetable oils or mineral oil, followed by a thorough washing with soap and water. Avoid contact of heated material with eyes, skin, and clothing. Do not breathe vapor or fumes from heated material. Keep out of the reach of children.

**General Handling Information:** Avoid contaminating soil or releasing this material into sewage and drainage systems and bodies of water.

**Static Hazard:** Electrostatic charge may accumulate and create a hazardous condition when handling this material. To minimize this hazard, bonding and grounding may be necessary but may not, by themselves, be sufficient. Review all operations which have the potential of generating an accumulation of electrostatic charge and/or a flammable atmosphere (including tank and container filling, splash filling, tank cleaning, sampling, gauging, switch loading, filtering, mixing, agitation, and vacuum truck operations) and use appropriate mitigating procedures. For more information, refer to OSHA Standard 29 CFR 1910.106, 'Flammable and Combustible Liquids', National Fire Protection Association (NFPA 77, 'Recommended Practice on Static Electricity', and/or the American Petroleum Institute (API) Recommended Practice 2003, 'Protection Against Ignitions Arising Out of Static, Lightning, and Stray Currents'.

**Container Warnings:** Container is not designed to contain pressure. Do not use pressure to empty container or it may rupture with explosive force. Empty containers retain product residue (solid, liquid, and/or vapor) and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition. They may explode and cause injury or death. Empty containers should be completely drained, properly closed, and promptly returned to a drum reconditioner or disposed of properly.

## SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

### GENERAL CONSIDERATIONS:

Consider the potential hazards of this material (see Section 3), applicable exposure limits, job activities, and other substances in the work place when designing engineering controls and selecting personal protective equipment. If engineering controls or work practices are not adequate to prevent exposure to harmful levels of this material, the personal protective equipment listed below is recommended. The user should read and understand all instructions and limitations supplied with the equipment since protection is usually provided for a limited time or under certain circumstances.

**ENGINEERING CONTROLS:**

Use in a well-ventilated area. Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below the recommended exposure limits.

**PERSONAL PROTECTIVE EQUIPMENT**

**Eye/Face Protection:** Wear protective equipment to prevent eye contact. Selection of protective equipment may include safety glasses, chemical goggles, face shields, or a combination depending on the work operations conducted. If this material is heated, wear chemical goggles or safety glasses or a face shield.

**Skin Protection:** Wear protective clothing to prevent skin contact. Selection of protective clothing may include gloves, apron, boots, and complete facial protection depending on operations conducted. Suggested materials for protective gloves include: Chlorinated Polyethylene (or Chlorosulfonated Polyethylene). If this material is heated, wear insulated clothing to prevent skin contact if engineering controls or work practices are not adequate to prevent skin contact.

**Respiratory Protection:** Determine if airborne concentrations are below the recommended exposure limits. If not, wear an approved respirator that provides adequate protection from measured concentrations of this material, such as: Air-Purifying Respirator for Organic Vapors, Dusts and Mists. Use a positive pressure air-supplying respirator in circumstances where air-purifying respirators may not provide adequate protection.

**Occupational Exposure Limits:**

Component	Limit	TWA	STEL	Ceiling	Notation
Asphalt	ACGIH_TLV	.5 mg/m3			A4

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.

**SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES**

**Attention:** the data below are typical values and do not constitute a specification.

- Color:** Tan to dark
- Physical State:** Liquid
- Odor:** Hydrocarbon odor
- pH:** 2.5 - 7
- Vapor Pressure:** NA
- Vapor Density (Air = 1):** NA
- Boiling Point:** 212 °F
- Solubility:** Readily dispersible in water
- Melting Point:** 30 °F
- Specific Gravity:** 0.9 - 1.1 @ 60 °C

**Viscosity:** 20 - 2000 SFS @ 70 °F

## SECTION 10 STABILITY AND REACTIVITY

**Chemical Stability:** This material is considered stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

**Incompatibility With Other Materials:** May react with strong oxidizing agents, such as chlorates, nitrates, peroxides, etc.

**Hazardous Decomposition Products:** None known (None expected)

**Hazardous Polymerization:** Hazardous polymerization will not occur.

## SECTION 11 TOXICOLOGICAL INFORMATION

### IMMEDIATE HEALTH EFFECTS

**Eye Irritation:** The eye irritation hazard is based on evaluation of data for similar materials or product components.

**Skin Irritation:** The skin irritation hazard is based on evaluation of data for similar materials or product components.

**Skin Sensitization:** The skin sensitization hazard is based on evaluation of data for similar materials or product components.

**Acute Dermal Toxicity:** The acute dermal toxicity hazard is based on evaluation of data for similar materials or product components.

**Acute Oral Toxicity:** The acute oral toxicity hazard is based on evaluation of data for similar materials or product components.

**Acute Inhalation Toxicity:** The acute inhalation toxicity hazard is based on evaluation of data for similar materials or product components.

### ADDITIONAL TOXICOLOGY INFORMATION:

There is concern about the carcinogenicity of chemical compounds found in asphalts. The International Agency for Research on Cancer (IARC) reviewed the carcinogenic potential of asphalts in 1985 and again in 1987. At that time, they concluded there was inadequate evidence to decide that asphalts were carcinogenic to humans. Overall, findings from health monitoring studies of asphalt workers are not conclusive. However, asphalt fume condensates and certain chemical components of asphalt fume have been shown to cause cancer in mice when repeatedly applied to the skin and allowed to remain on the skin for a prolonged period of time. In addition, asphalt fume condensates have been shown to be weakly positive in Ames mutagenicity tests. Skin contact and breathing of fumes, mists and vapors should be reduced to a minimum.

## SECTION 12 ECOLOGICAL INFORMATION

### ECOTOXICITY

This material may be toxic to aquatic organisms and should be kept out of sewage and drainage systems and all bodies of water.

### ENVIRONMENTAL FATE

No data available.

## SECTION 13 &nbsp;DISPOSAL CONSIDERATIONS

Use material for its intended purpose or recycle if possible. &nbsp;This material, if it must be discarded, may meet the criteria of a hazardous waste as defined by US EPA under RCRA (40 CFR 261) or other State and local regulations. &nbsp;Measurement of certain physical properties and analysis for regulated components may be necessary to make a correct determination. &nbsp;If this material is classified as a hazardous waste, federal law requires disposal at a licensed hazardous waste disposal facility.

## SECTION 14 &nbsp;TRANSPORT INFORMATION

The description shown may not apply to all shipping situations. &nbsp;Consult 49CFR, or appropriate Dangerous Goods Regulations, for additional description requirements (e.g., technical name) and mode-specific or quantity-specific shipping requirements.

**DOT Shipping Name:** NOT REGULATED AS A HAZARDOUS MATERIAL FOR TRANSPORTATION UNDER 49 CFR

**DOT Hazard Class:** NOT APPLICABLE

**DOT Identification Number:** NOT APPLICABLE

**DOT Packing Group:** NOT APPLICABLE

## SECTION 15 &nbsp;REGULATORY INFORMATION

**SARA 311/312 CATEGORIES:**

&nbsp;1. &nbsp;Immediate (Acute) Health Effects:	YES
&nbsp;2. &nbsp;Delayed (Chronic) Health Effects:	&nbsp;YES
&nbsp;3. &nbsp;Fire Hazard:	NO
&nbsp;4. &nbsp;Sudden Release of Pressure Hazard:	NO
&nbsp;5. &nbsp;Reactivity Hazard:	&nbsp;NO

### REGULATORY LISTS SEARCHED:

4_I1=IARC Group 1	15=SARA Section 313
4_I2A=IARC Group 2A	16=CA Proposition 65
4_I2B=IARC Group 2B	17=MA RTK
05=NTP Carcinogen	18=NJ RTK
06=OSHA Carcinogen	19=DOT Marine Pollutant
09=TSCA 12(b)	20=PA RTK

The following components of this material are found on the regulatory lists indicated.

Asphalt	17, 18, 20
Naphtha, light straight run	17, 18, 20

**CHEMICAL INVENTORIES:**

UNITED STATES: All of the components of this material are on the Toxic Substances Control Act (TSCA) Chemical Inventory.

CANADA: All the components of this material are on the Canadian DSL or have been notified under the New Substance Notification Regulations, but have not yet been published in the Canada Gazette.

**WHMIS CLASSIFICATION:**

Class D, Division 2, Subdivision B: Toxic Material - Skin or Eye Irritation

**SECTION 16 OTHER INFORMATION**

**NFPA RATINGS:**   Health: 0   Flammability: 1   Reactivity: 0  
**HMIS RATINGS:**   Health: 1\*   Flammability: 1   Reactivity: 0

(0-Least, 1-Slight, 2-Moderate, 3-High, 4-Extreme, PPE:- Personal Protection Equipment Index recommendation, \*- Chronic Effect Indicator). These values are obtained using the guidelines or published evaluations prepared by the National Fire Protection Association (NFPA) or the National Paint and Coating Association (for HMIS ratings).

**REVISION STATEMENT:** This revision updates the following sections of this Material Safety Data Sheet:Section 1 (Product Codes) and all other sections (prepared using the ProSteward MSDS system). This Material Safety Data Sheet replaces Chevron MSDSs: 1887, 1905, 1911, 1912, 1914, 1915, 1918, 3188, 3563, & 5406.

**ABBREVIATIONS THAT MAY HAVE BEEN USED IN THIS DOCUMENT:**

TLV	-	Threshold Limit Value	TWA	-	Time Weighted Average
STEL	-	Short-term Exposure Limit	PEL	-	Permissible Exposure Limit
			CAS	-	Chemical Abstract Service Number
NDA	-	No Data Available	NA	-	Not Applicable
<=	-	Less Than or Equal To	>=	-	Greater Than or Equal To

Prepared according to the OSHA Hazard Communication Standard (29 CFR 1910.1200) and the ANSI MSDS Standard (Z400.1) &nbsp;by the ChevronTexaco Energy Research & Technology Company, 100 Chevron Way, Richmond, California 94802.

**The above information is based on the data of which we are aware and is believed to be correct as of the date hereof. &nbsp;Since this information may be applied under conditions beyond our control and with which we may be unfamiliar and since data made available subsequent to the date hereof may suggest modifications of the information, we do not assume any responsibility for the results of its use. &nbsp;This information is furnished upon condition that the person receiving it shall make his own determination of the suitability of the material for his particular purpose.**