



MATERIAL SAFETY DATA SHEET EMERGENCY TELEPHONE NUMBERS

CHEMTREC: 800-424-9300 (24 HOURS)

PARAMOUNT: 562-531-2060

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT: **Gmulsilgf 'Cur j crv – Cationic**

PRODUCT CODES: 13506, 13507, 13508, 13511, 13518, 13519, 13520, 13521, 13522, 13525, 13526, 13527, 13528, 13529, 13533, 13534, 13535, 13536, 13537, 13538, 13539, 13540, 13541, 13542, 13543, 13544, 13545, 13546, 13564

GRADES: CSS-1H, CSS-1H Dilute, CSS-1, CSS-1 Dilute, CMS-2, CMS-2 Dilute, CMS-2S, CMS-2RA, CRS-1, CRS-1H, CRS-2, CRS-2H, CRS-2B, CRS-2NV, CQS-1H, CQS-1H Dilute,

MANUFACTURER: PARAMOUNT PETROLEUM CORPORATION
14700 Downey Ave.
Paramount, California 90723

MSDS DATE: December 21, 2010

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

HAZARDOUS COMPONENTS	% Weight	EXPOSURE GUIDELINE		
		Limits	Agency	Type
Asphalt (CAS#8052424)	< 67.00	0.5 mg/m ³	ACGIH	TWA
Water (CAS#7732185)	< 45.00	NONE	NA	NA
Naphtha, Light Straight Run (CAS#64741464)	0.00 – 6.00	NONE	NA	NA
May contain:				
Copolymers	4.00			
Alkyl-amine hydrochloride	< 1.00			
Proprietary Additive(s)	< 2.00			
Hydrogen Sulfide (CAS# 7783-06-4 (May be liberated if heated) 15	Varies (<1)	10 ppm ppm 20 ppm 50 ppm	ACGIH ACGIH OSHA OSHA	TWA STEL CEIL 10 min. peak; once per 8 hour shift

Note: All the components of this material are on the Toxic Substances Control Act Chemical Substances Inventory.

Note: 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.

Note: State, local or other agencies or advisory groups may have established more stringent limits. Consult an industrial hygienist or similar professional, or you local agencies, for further information.

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SECTION 3:	HAZARDS IDENTIFICATION
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EMERGENCY OVERVIEW

Tan to dark liquid

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

< Physical Form: Liquid	NFPA HAZARD CLASS: Health:	0 (Least)
< Appearance: Tan to dark	Flammability:	1 (Slight)
< Odor:	Reactivity:	0 (Least)

POTENTIAL HEALTH EFFECTS:

Eye: Contact with the eyes may cause irritation. If this material is heated, thermal burns may result from eye contact.

Skin: Contact with the skin may cause irritation. If this material is heated, thermal burns may result from skin contact.

Inhalation (Breathing): Excessive or prolonged breathing of this material may cause central nervous system effects.

Ingestion (Swallowing): Not expected to be harmful if swallowed.

Signs and Symptoms: Eye irritation: may include pain, tearing, reddening, swelling, and impaired vision. Thermal burns to the eye: may include pain, tearing, reddening, swelling, and impaired vision. Thermal burns to the skin: may include pain or feeling of heat, discoloration, swelling, and blistering. Respiratory irritation: may include coughing and difficulty breathing. Skin irritation: may include pain, reddening, swelling, and blistering. Thermal burns to the skin: may include pain or feeling of heat, discoloration, swelling, and blistering.

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.

Cancer: May cause cancer in laboratory animals, but the available information is inadequate to determine if this material can cause cancer in humans. See Section 11 for additional information.

Target Organs:

Developmental:

Other Comments:

Pre-Existing Medical Conditions:

SECTION 4:	FIRST AID MEASURES
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Eye: Flush eyes with copious amounts of 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.

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If heated material should splash into the 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 immediately with soap and water and remove contaminated clothing and shoes. Get medical attention if irritation persists. 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.

Inhalation (Breathing): Move the exposed person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get immediate medical attention if symptoms continue.

Ingestion (Swallowing): No specific first aid measures are required because this material is not expected to be harmful if swallowed. Do not induce vomiting. As a precaution, give the person a glass of water or milk to drink and get medical advice. Never give anything by mouth to an unconscious person.

SECTION 5: FIRE FIGHTING MEASURES

Flammable Properties: Flash Point: See fire fighting instructions
OSHA Flammability Class: Not classified as flammable or combustible
LEL/UEL: No data
Autoignition Temperature: NA

Unusual Fire & Explosion Hazards:

Combustion Products: This material normally will not burn. However, dehydrated residue will burn. Normal combustion forms carbon dioxide, water vapor and may produce oxides of sulfur and nitrogen. Incomplete combustion can produce carbon monoxide.

Extinguishing Media: CO₂, dry chemical, foam and water fog.

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 212°F 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.

For fires involving this material, do not enter any enclosed or confined fire space without proper protective equipment, including self-contained breathing apparatus.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Eliminate all sources of ignition in the vicinity of the spill or released vapor.

If liquid material is spilled, allow it to cool and solidify before proceeding with disposal methods. Clean up small spills using appropriate techniques such as sorbent materials or pumping. Where feasible and appropriate, remove contaminated soil. Follow prescribed procedures for reporting and responding to larger releases.

Release of this product should be prevented from contaminating soil and water and from entering drainage and sewer systems. U.S.A. regulations require reporting spills of this material that could reach any surface waters. The toll free number for the U.S. Coast Guard National Response Center is (800) 424-8802.

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SECTION 7: HANDLING AND STORAGE
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DO NOT USE OR STORE near flame, sparks or hot surfaces. USE ONLY IN WELL VENTILATED AREA. Keep container closed. Do not heat above 200 °F (93.3°C) 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.

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 properly disposed of.

Do not get in eyes, on skin, or on clothing. Do not breathe vapor or fumes. 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 contaminating soil or releasing this material into sewage and drainage systems and bodies of water.

Handling: Do not enter confined spaces such as tanks or pits without following proper entry procedures such as ASTM D-4276 and 29CFR 1910.146. The use of appropriate respiratory protection is advised when concentrations exceed any established exposure limits (see Section 2 and 8). Wash thoroughly after handling. Do not wear contaminated clothing or shoes. Use good personal hygiene practice.

“Empty” containers retain residue and may be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, or other sources of ignition. They may explode and cause injury or death. Containers should be disposed of in an environmentally safe manner and in accordance with governmental regulations.

Before working on or in tanks, which contain or have contained this material, refer to OSHA regulations, ANSI Z49.1 and other references pertaining to cleaning, repairing, welding, or other contemplated operations.

Storage: Minimize oxygen content of tank head space as temperature approaches flash point. See API publication 2023. Keep container(s) tightly closed. In a tank, barge, or other closed container, the vapor space above this material may contain hydrogen sulfide (H₂S) in concentrations immediately dangerous to life and health (IDLH). Use and store this material in cool, dry, well-ventilated areas away from all sources of ignition. Post area “No Smoking or Open Flame.”

Hot asphalt must never be added to a tank or other container that is not completely dry. Contact with water results in violent expansion as the water turns to steam. This can lead to dangerous boil over and may cause damage or rupture of the tank or container. Keep away from any incompatible material (see Section 10).

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

General considerations: Consider the potential hazards of this material, 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

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understand all instructions and limitations supplied with the equipment since protection is usually supplied for a limited time or under certain circumstances.

Engineering controls: Use in a well-ventilated area. If user operations generate airborne material, use process enclosures, local exhaust ventilation, or other engineering controls to control exposure. If heated material generates vapor or fumes, use process enclosures, local exhaust ventilation, or other engineering controls to control exposure.

Personal Protective Equipment (PPE):

Respiratory: Wear a NIOSH approved respirator that provides protection when working with this material if exposure to harmful levels of airborne material may occur. Use the following respirators: Organic Vapor, Dust and Mist.

Use a positive pressure, air-supplying respirator if there is potential for uncontrolled release, exposure levels are not

known, or other circumstances where air-purifying respirators may not provide adequate protection.

Skin: Wear protective clothing if engineering controls or work practices are not adequate 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 or CPE)> >><Viton> Heat protective lining for hot work.

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.

Eye/Face: No eye protection is normally required. If this material is heated, wear chemical goggles and a face shield if engineering controls or work practices are not adequate to prevent eye contact.

Other Protective Equipment:

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES
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Flash Point: See fire fighting instructions

Flammable/Explosive Limits (%):

Autoignition Temperature: NA

Appearance: Tan to dark

Physical State: Liquid

Odor:

Vapor Pressure (mm Hg):

Vapor Density (air=1):

Specific Gravity: 0.9 – 1.1 @ 60/60°C

API Gravity:

Bulk Density:

Boiling Point: 212°F (100°C) (water)

Solubility: Readily dispersible in water

Viscosity: 20 – 2,000 SFS @ 77°F

Melting Point: 30°F (-1°C) (water)

pH: 2.5 - 7

SECTION 10: STABILITY AND REACTIVITY

Chemical Stability: Stable.

Conditions To Avoid: See section 7.

Incompatible Materials: May react with strong oxidizing agents, such as chlorates, nitrates, peroxides, etc.

Hazardous Decomposition Products: NDA

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Hazardous Polymerization: Polymerization will not occur.

SECTION 11:	TOXICOLOGICAL INFORMATION
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Asphalt (CAS#8052424)

Carcinogenicity: Skin application of asphalt fume condensate fractions caused skin tumors in laboratory mice. Animal studies in which high concentrations of asphalt fumes were breathed for extended periods of time did not cause carcinogenic effects.

There is no evidence presented by the National Toxicology Program (NTP) or the Occupational Safety and Health Administration (OSHA) to establish Asphalt as a carcinogen (cancer causing compound). After a review of the research, the International Agency for Research on Cancer (IARC) concluded there is inadequate evidence that bitumes (asphalt) alone are carcinogenic in humans; that there is limited evidence to suggest that asphalt alone is carcinogenic to humans.

Occupational Exposure: Data released by the National Institute of Occupational Safety and Health (NIOSH) suggests paving and roofing asphalt fumes and asphalt paint fumes are a potential carcinogen to individuals who have long term exposure to high concentrations of fumes, as might be expected from workers in the paving and roofing industries. The data is based on animal and human studies and have not been validated as conclusive by other studies or research organizations.

Exposure to the Community or to responders, if any, is infrequent, and typically at concentrations and durations significantly below levels of exposure that might be experienced by paving and roofing workers. Asphalt odors occur at levels significantly below levels needed to produce harmful health effects.

SECTION 12:	ECOLOGICAL INFORMATION
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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:	DISPOSAL CONSIDERATIONS
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Use material for its intended purpose or recycle if possible. This material, if it must be discarded, may meet the criteria of a hazardous waste as defined by USEPA under RCRA (40CFR261) or other state and local regulations. Measurement of certain physical properties and analysis for regulated components may be necessary to make a correct determination. If this material is classified as a hazardous waste, federal law requires disposal at a licensed hazardous waste disposal facility.

SECTION 14:	TRANSPORT INFORMATION
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The description shown may not apply to all shipping situations. Consult 49CFR, or appropriate Dangerous Goods Regulations, for additional description requirements (e.g., technical name) and mode-specific or quantity-specific shipping requirements.

DOT Proper Shipping Name / Technical Name: Not designated as a hazardous material by the Federal DOT

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Hazard Class or Division: NA

ID #: NA

Packing Group: NA

Note:

SECTION 15:	REGULATORY INFORMATION
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SARA Title III Sections 311 and 312 – MSDS Requirements (40 CFR 370):

Acute: Yes Chronic: Yes Fire: No Pressure: No Reactive: No

EPA (CERCLA) Reportable Quantity:

SECTION 16:	OTHER INFORMATION
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Previous Issue Date: March 14, 2005

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