



Material Safety Data Sheet

1. IDENTIFICATION

PRODUCT NAME: H2-14B-C

CHEMICAL NAME: Cationic emulsion

For emergencies call Chemtrec at 1-800-424-9300

2. HAZARD(S) IDENTIFICATION

PRIMARY ROUTES OF ENTRY: Absorption – Eye and Skin

EMERGENCY OVERVIEW: WARNING: Irritating to eyes. Do not get in eyes, on skin, on clothing. Do not take internally. Use with adequate ventilation. Wear suitable protective clothing. May evolve oxides of carbon (Cox) under fire conditions. May evolve oxides of nitrogen (NOx) under fire conditions.

EYES: Irritating to eyes.

SKIN: May cause irritation with prolonged contact

INGESTION: Not a likely route of exposure. No adverse effects expected.

INHALATION: Not a likely route of exposure. No adverse effects expected.

SYMPTOMS OF EXPOSURE:

ACUTE: A review of available data does not identify any symptoms from exposure not previously mentioned.

CHRONIC: A review of available data does not identify any symptoms from exposure not previously mentioned.

HUMAN HEALTH HAZARDS: No adverse effects expected other than those mentioned above.

HMIS Ratings: Fire 1 Health: 2 Reactivity: 0 Personal Protection:

3. COMPOSITION / INFORMATION ON INGREDIENTS

<u>CAS #</u>	<u>COMPONENT</u>	<u>PERCENT</u>
57-13-6	Urea	1.0 – 5.0
Proprietary	Oxyalkylated alcohol	1.0 – 5.0

4. FIRST-AID MEASURES

EYES: Immediately flush with water, continuing for at least 20 minutes pulling the eyelids away from the eyeball to ensure thorough rinsing. If symptoms develop, seek medical advice.

SKIN: Flush with plenty of water. If symptoms develop, seek medical advice.

INGESTION: Get medical attention. Do not induce vomiting without medical advice. If conscious, wash out mouth and give water to drink. If reflexive vomiting occurs, rinse mouth and repeat administration of water.

INHALATION: Remove to fresh air. Treat symptomatically. If symptoms develop, seek medical advice.

5. FIRE-FIGHTING MEASURES

FLASH POINT: >200°F / >93.3°C

EXTINGUISHING MEDIA: This product would not be expected to burn unless all the water is oiled away. The remaining organics may be ignitable. Use extinguishing media appropriate for the surrounding fire.

HAZARDOUS COMBUSTION PRODUCTS: May evolve oxides of carbon (Cox) under fire conditions. May evolve oxides of nitrogen (NOx) under fire conditions.

FIRE FIGHTING EQUIPMENT/INSTRUCTIONS: in case of fire, wear a full face positive-pressure self contained breathing apparatus and protective suit.

NFPA RATINGS: FIRE: 1 HEALTH: 2 REACTIVITY: 0
OTHER:

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS: Restrict access to area as appropriate until clean up operations are complete. Use personal protective equipment recommended in Section *. Stop or reduce any leaks if it is safe to do so. Ventilate spill area if possible. Ensure clean up is conducted by trained personnel only. Do not touch spilled material. Have emergency equipment (for fires, spills, leaks, etc.) readily available. Notify appropriate government, occupational health and safety and environmental authorities.

METHODS FOR CLEANING UP: Small spills: Soak up spill with absorbent material. Place residues in a suitable, covered, properly labeled container. Wash affected area. Large Spills: Contain liquid using absorbent material, by digging trenches or by diking. Reclaim into recovery or salvage drums or tank truck for proper disposal. Clean contaminated surfaces with water or aqueous cleaning agents. Contact an approved waste hauler for disposal of contaminated recovered material. Dispose of material in compliance with regulations indicated in Section 13 Disposal Considerations.

ENVIRONMENTAL PRECAUTIONS: Do not contaminate surface water.

7. HANDLING AND STORAGE

NORMAL HANDLING: Do not get in eyes, on skin, on clothing. Do not take internally. Use with adequate ventilation. Do not breathe vapors/gases/dust. Keep the containers closed when not in use. Have emergency equipment for fires, spills, leaks, etc. readily available.

STORAGE: Store in suitable labeled containers. Store the containers tightly closed.

SUITABLE CONSTRUCTION MATERIAL: Compatibility with plastic materials can vary; we therefore recommend that compatibility is tested prior to use.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS: Ventilation and other forms of engineering controls are the preferred means for controlling exposures.

RESPIRATORY PROTECTION: A NIOSH / MSHA approved air purifying respirator with an appropriate acid gas cartridge or canister may be appropriate under certain circumstances where airborne concentrations are expected to exceed exposure limits.

EYE PROTECTION: Wear chemical safety goggles / face shield.

SKIN PROTECTION: When handling this product, the use of overalls is recommended.

WORK/HYGIENIC PRACTICES: Use of good work and personal hygiene practices to avoid exposure. Keep an eye wash fountain available. Keep a safety shower available. If clothing is contaminated, remove clothing and thoroughly wash the affected area. Launder contaminated clothing before reuse. Always wash thoroughly after handling chemicals. When handling this product never eat, drink or smoke.

ADDITIONAL INFORMATION: The presence of an eyewash and safety shower is recommended.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Off-white Opaque
PHYSICAL STATE: Liquid
ODOR: Hydrocarbon
SPECIFIC GRAVITY (WATER = 1.0): 1.04
DENSITY 8.64 pounds per gallon
SOLUBILITY IN WATER Dispersible

MSDS

H2-14B-C

PH: 3.5 – 6
 VISCOSITY: 500 – 3,000 cps @ 25°F / -3.8°C
 VOC CONTENT: 30.28% calculated

10. STABILITY AND REACTIVITY

CHEMICAL STABILITY: Stable under normal conditions.
CONDITIONS TO AVOID: None known.
INCOMPATIBILITY: None known.
HAZARDOUS DECOMPOSITION: Under fire conditions: Oxides of carbon, Oxides of nitrogen.
HAZARDOUS POLYMERIZATION: Will not occur.

11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY / CHRONIC TOXICITY: No toxicity studies have been conducted on this product.
CARCINOGENICITY: None of the substances in this product are listed as carcinogens by the International Agency for Research on Cancer (IARC), the National Toxicology Program (NTP) or the American Conference of Governmental Industrial Hygienists (ACGIH).
HUMAN HAZARD CHARACTERIZATION: Based on our hazard characterization, the potential human hazard is: Moderate.

12. ECOLOGICAL INFORMATION

ACUTE FISH RESULTS

Species	Exposure	LC50	Test Descriptor
Inland Silverside	96 hours	>1,000 mg/l	1% Aqueous Solution of Product

Rating: Essentially Non-Toxic

ACUTE INVERTEBRATE RESULTS

Species	Exposure	LC50	EC50	Test Descriptor
Mysid Shrimp	96 hours	57 mg/l	49 mg/l	1% Aqueous Solution of Product

Rating: Slightly Toxic

PERSISTENCY AND DEGRADATION

Total Organic Carbon (**TOC**): 340,000 mg/l - Chemical Oxygen Demand (**COD**): 1,300,000 mg/l
 Biological Oxygen Demand (**BOD**):

Incubation Period	Value	Test Descriptor
5 d	500,000 mg/l	Product

The organic portion of this preparation is expected to be inherently biodegradable.

MOBILITY: The environmental fate was estimated using a level III fugacity model embedded in the EPI (estimation program interface) Suite TM, provided by the US EPA. The model assumes a steady state condition between the total input and output. The level III model does not require equilibrium between the defined media. The information provided is intended to give the user a general estimate of the environmental fate of this product under the defined conditions of the models. If released into the environment, this material is expected to distribute to the air, water and soil/sediment in the approximate respective percentages;

AIR	WATER	SOIL/SEDIMENT
<5%	10 – 30%	50 – 70%

The portion in water is expected to be soluble or dispersible.

BIOACCUMULATION POTENTIAL: Component substances have a potential to bioconcentrate.

ENVIRONMENTAL HAZARD AND EXPOSURE CHARACTERIZATION: Based on our hazard characterization, the potential environmental hazard is: High

13. DISPOSAL CONSIDERATIONS

If this product becomes a waste, it is not a hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA) 40 CFR 261, since it does not have the characteristics of Subpart C nor is it listed under Subpart D.

As a non-hazardous waste, it is not subject to federal regulation. Consult state or local regulation for any additional handling, treatment or disposal requirements. For disposal, contact a properly licensed waste treatment, storage, disposal or recycling facility.

14. TRANSPORT INFORMATION

THIS PRODUCT IS NOT REGULATED BY DOT OR CANADIAN (TDG) transportation regulation.

15. REGULATORY INFORMATION

NATIONAL REGULATIONS, USA:

OSHA HAZARD COMMUNICATION RULE, 29 CFR 1910.1200: Based on our hazard evaluation, the following substance(s) in this product is/are hazardous and the reason is shown below

Urea	Eye irritant
Oxyalkylated alcohol	Eye irritant

CERCLA/SUPERFUND, 40 CFR 117.302: Notification of spills of this product is not required.

SARA/SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986 (TITLE III) – SECTIONS 302, 311, 312 AND 313:

SECTION 302 – EXTREMELY HAZARDOUS SUBSTANCES (40 CFR 355): This product does not contain substances listed in Appendix A and B as an Extremely Hazardous Substance.

SECTIONS 311 AND 312 – MATERIAL SAFETY DATA SHEET REQUIREMENTS (40 CFR 370): Our hazard evaluation has found this product to be hazardous. The product should be reported under the following EPA hazard categories:

Immediate (Acute) Health Hazard

Under SARA 311 and 312, the EPA has established threshold quantities or the reporting of hazardous chemicals. The current thresholds are: 500 pounds or the threshold planning quantity (TPQ), whichever is lower, for extremely hazardous substances and 10,000 pounds for all other hazardous chemicals.

SECTION 313 – LIST OF TOXIC CHEMICALS (40 CFR 372): This product does not contain substances of the List of Toxic Chemicals.

TOXIC SUBSTANCES CONTROL ACT (TSCA): The substances in this preparation are included on or exempted from the TSCA 8(b) Inventory (40 CFR 710).

FEDERAL WATER POLLUTION CONTROL ACT, CLEAN WATER ACT, 40 CFR 401.15 / FORMERLY SEC. 307, 40 CFR 116.4 / FORMERLY SEC 311: None of the substances are specifically listed in the regulation.

CLEAN AIR ACT, SEC. 111 (40 CFR 60, VOLATILE ORGANIC COMPOUNDS), SEC 112 (40 CFR 61, HAZARDOUS AIR POLLUTANTS), SEC. 602 (40 CFR 82, CLASS I AND II OZONE DEPLETING SUBSTANCES): This product contains the following substances listed in the regulation:

Substance: Urea Citations: Sec.111

CALIFORNIA PROPOSITION 65: This product does not contain substances which require warning under California Proposition 65.

MICHIGAN CRITICAL MATERIALS: None of the substances are specifically listed in the regulation

NATIONAL REGULATIONS – CANADA

WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM (WHMIS): This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CFR.

WHMIS CLASSIFICATION: D2B – Materials Causing Other Toxic Effects – Toxic Material

CANADIAN ENVIRONMENTAL PROTECTION ACT (CEPA): The substances in this preparation are listed on the Domestic Substance List (DSL), are exempt, or have been reported in accordance with the New Substances Notification Regulations.

16. OTHER INFORMATION

DISCLAIMER:

We believe that the information in this MSDS is accurate. The suggested procedures are based on experience as of the date of publication. They are not necessarily either all-inclusive or fully adequate in every circumstance. Also, these suggestions should not be confused with or followed in violation of applicable laws, regulations, rules or insurance requirements.

NO WARRANTY IS MADE, EXPRESSED OR IMPLIED, OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE.