HALLIBURTON

MATERIAL SAFETY DATA SHEET

Product Trade Name: CAI-107W

Revision Date: 03-Jan-2013

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Trade Name: CAI-107W Synonyms: None Chemical Family: Amine

Application: Corrosion Inhibitor

Manufacturer/Supplier Halliburton Energy Services

P.O. Box 1431

Duncan, Oklahoma 73536-0431

Emergency Telephone: (281) 575-5000

Prepared By Chemical Compliance

Telephone: 1-580-251-4335

e-mail: fdunexchem@halliburton.com

2. COMPOSITION/INFORMATION ON INGREDIENTS

Substances	CAS Number	PERCENT	ACGIH TLV-TWA	OSHA PEL-TWA
Ethoxylated alkyl amines		10 - 30%	Not applicable	Not applicable

3. HAZARDS IDENTIFICATION

Hazard Overview May cause eye, skin, and respiratory irritation. May be harmful if swallowed.

4. FIRST AID MEASURES

Inhalation If inhaled, remove to fresh air. If not breathing give artificial respiration, preferably

mouth-to-mouth. If breathing is difficult give oxygen. Get medical attention.

Skin In case of contact, immediately flush skin with plenty of soap and water for at least 15

minutes. Get medical attention.

Eyes In case of contact, or suspected contact, immediately flush eyes with plenty of water

for at least 15 minutes and get medical attention immediately after flushing.

Ingestion Do not induce vomiting. Slowly dilute with 1-2 glasses of water or milk and seek

medical attention. Never give anything by mouth to an unconscious person.

Notes to Physician Not Applicable

FIRE FIGHTING MEASURES

Flash Point/Range (F): Not DeterminedMin: > 212 Flash Point/Range (C): Not DeterminedMin: > 100

Flash Point Method: TCC

Autoignition Temperature (F): Not Determined **Autoignition Temperature (C):** Not Determined Flammability Limits in Air - Lower (%): Not Determined Flammability Limits in Air - Upper (%): Not Determined

Fire Extinguishing Media Water fog, carbon dioxide, foam, dry chemical. **Special Exposure Hazards** Decomposition in fire may produce toxic gases.

Fire-Fighters

Special Protective Equipment for Full protective clothing and approved self-contained breathing apparatus required for

fire fighting personnel.

Health 1, Flammability 0, Reactivity 0 **NFPA Ratings: HMIS Ratings:** Health 1, Flammability 0, Reactivity 0

ACCIDENTAL RELEASE MEASURES

Personal Precautionary Measures Use appropriate protective equipment.

Environmental Precautionary

Measures

Prevent from entering sewers, waterways, or low areas.

Procedure for Cleaning /

Absorption

Isolate spill and stop leak where safe. Contain spill with sand or other inert materials.

Scoop up and remove.

HANDLING AND STORAGE

Avoid contact with eyes, skin, or clothing. Avoid breathing vapors. Wash hands after **Handling Precautions**

use. Launder contaminated clothing before reuse.

Storage Information Store away from oxidizers. Store away from acids. Keep container closed when not

in use.

EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls Use in a well ventilated area.

Respiratory Protection Organic vapor respirator.

Hand Protection Impervious rubber gloves.

Skin Protection Rubber apron.

Chemical goggles; also wear a face shield if splashing hazard exists. **Eye Protection**

Other Precautions Evewash fountains and safety showers must be easily accessible.

PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Liquid

Color: Light yellow to amber

Odor: Mild pH: 10-11 PHYSICAL AND CHEMICAL PROPERTIES

Specific Gravity @ 20 C (Water=1): 1.03

Density @ 20 C (lbs./gallon): 8.58

Not Determined Bulk Density @ 20 C (lbs/ft3): **Boiling Point/Range (F):** Not Determined **Boiling Point/Range (C):** Not Determined

Freezing Point/Range (F): Not Determined Freezing Point/Range (C): Not Determined Vapor Pressure @ 20 C (mmHg): Not Determined Vapor Density (Air=1): Not Determined **Percent Volatiles:** Not Determined **Evaporation Rate (Butyl Acetate=1):** Not Determined

Solubility in Water (g/100ml): Soluble

Solubility in Solvents (g/100ml): Not Determined VOCs (lbs./gallon): Not Determined Not Determined Viscosity, Dynamic @ 20 C (centipoise): Viscosity, Kinematic @ 20 C (centistokes): Not Determined Partition Coefficient/n-Octanol/Water: Not Determined Molecular Weight (g/mole): Not Determined

10. STABILITY AND REACTIVITY

Stability Data: Stable

Will Not Occur **Hazardous Polymerization:**

Conditions to Avoid Keep away from heat, sparks and flame.

Incompatibility (Materials to

Avoid)

Strong oxidizers. Strong acids.

Hazardous Decomposition

Products

Oxides of nitrogen. Carbon monoxide and carbon dioxide.

Additional Guidelines Not Applicable

TOXICOLOGICAL INFORMATION

Principle Route of Exposure Eye or skin contact, inhalation.

Inhalation May cause respiratory irritation.

Skin Contact May cause skin defatting with prolonged exposure. Prolonged or repeated contact

may cause skin irritation.

Eye Contact May cause eye irritation.

Irritation of the mouth, throat, and stomach. May cause abdominal pain, vomiting, Ingestion

nausea, and diarrhea.

Aggravated Medical Conditions Eye ailments. Skin disorders.

May contain ethylene oxide in the headspace of the drum. Ethylene oxide is a Chronic Effects/Carcinogenicity

> cancer and reproductive hazard. Amines may form nitrosamines, a suspect carcinogen, if product is mixed with nitrates, nitrites, nitrogen oxides or other

nitrosamines.

Other Information None known.

Toxicity Tests

Oral Toxicity: Not determined

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Dermal Toxicity: Not determined

Inhalation Toxicity: Not determined

Primary Irritation Effect: Not determined

Carcinogenicity Not determined

Genotoxicity: Not determined

Reproductive /

Developmental Toxicity:

Not determined

12. ECOLOGICAL INFORMATION

Mobility (Water/Soil/Air) Not determined

Persistence/Degradability Not determined

Bio-accumulation Not determined

Ecotoxicological Information

Acute Fish Toxicity: Not determined Acute Crustaceans Toxicity: Not determined Acute Algae Toxicity: Not determined

Chemical Fate Information Not determined

Other Information Not applicable

13. DISPOSAL CONSIDERATIONS

Disposal MethodDisposal should be made in accordance with federal, state, and local regulations.

Contaminated Packaging Follow all applicable national or local regulations.

14. TRANSPORT INFORMATION

Land Transportation

DOT

Not restricted

Canadian TDG

Not restricted

ADR

Not restricted

Air Transportation

ICAO/IATA

Not restricted

Sea Transportation

IMDG

Not restricted

Other Transportation Information

Labels: None

15. REGULATORY INFORMATION

US Regulations

US TSCA Inventory All components listed on inventory or are exempt.

EPA SARA Title III Extremely Hazardous Substances

Not applicable

EPA SARA (311,312) Hazard

Class

Acute Health Hazard

EPA SARA (313) Chemicals This product does not contain a toxic chemical for routine annual "Toxic Chemical

Release Reporting" under Section 313 (40 CFR 372).

EPA CERCLA/Superfund Reportable Spill Quantity

Not applicable.

EPA RCRA Hazardous Waste

Classification

If product becomes a waste, it does NOT meet the criteria of a hazardous waste as

defined by the US EPA.

California Proposition 65 All components listed do not apply to the California Proposition 65 Regulation.

MA Right-to-Know Law Does not apply.

NJ Right-to-Know Law Does not apply.

PA Right-to-Know Law Does not apply.

Canadian Regulations

Canadian DSL Inventory All components listed on inventory or are exempt.

WHMIS Hazard Class D2B Toxic Materials

16. OTHER INFORMATION

The following sections have been revised since the last issue of this MSDS

Not applicable

Additional Information For additional information on the use of this product, contact your local Halliburton

representative.

For questions about the Material Safety Data Sheet for this or other Halliburton

products, contact Chemical Compliance at 1-580-251-4335.

Disclaimer Statement

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END OF MSDS