

MATERIAL SAFETY DATA SHEET

Product Trade Name: CAI-107W

Revision Date: 23-Apr-2013

Revision Number: 6

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier

Product Trade Name: CAI-107W
Synonyms: None
Chemical Family: Amine
Internal ID Code HM503562

Product Use

Application: Corrosion Inhibitor

Manufacturer's Name and Contact Details

Name and Address Halliburton Energy Services
645 - 7th Ave SW Suite 2200
Calgary, AB
T2P 4G8
Canada
Emergency Telephone Number (281) 575-5000

Prepared By

Chemical Compliance
Telephone: 1-580-251-4335
e-mail: fdunexchem@halliburton.com

2. HAZARD(S) IDENTIFICATION

WHMIS Classification

WHMIS Hazard Class D2B Toxic Materials

WHMIS Symbol(s)



Summary of hazards of the product
Hazard Overview

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

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substances	CAS Number	PERCENT	HMIRC Registry Number	Filing Date
Ethoxylated alkyl amines	Proprietary	10 - 30%		
Rosin amines	61790-47-4	1 - 5%		

4. FIRST AID MEASURES**Description of 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.

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.

Skin

In case of contact, immediately flush skin with plenty of soap and water for at least 15 minutes. Get medical attention.

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.

Most Important symptoms and effects, both acute and delayed

May cause eye, skin, and respiratory irritation.

Indication of any immediate medical attention and special treatment needed**Notes to Physician**

Treat symptomatically

5. FIRE FIGHTING MEASURES**Extinguishing media****Suitable Extinguishing Media**

Water fog, carbon dioxide, foam, dry chemical.

Extinguishing media which must not be used for safety reasons

None known.

Special hazards arising from the substance or mixture**Special Exposure Hazards**

Decomposition in fire may produce toxic gases.

Advice for firefighters**Special Protective Equipment for Fire-Fighters**

Full protective clothing and approved self-contained breathing apparatus required for fire fighting personnel.

Hazardous combustion products

Oxides of nitrogen. Carbon monoxide and carbon dioxide.

6. ACCIDENTAL RELEASE MEASURES**Personal precautions and emergency procedures****Protective Equipment**

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.

7. HANDLING AND STORAGE

Precautions for safe handling

Avoid contact with eyes, skin, or clothing. Avoid breathing vapors. Wash hands after use. Launder contaminated clothing before reuse.

Conditions for safe storage and Incompatible materials for storage

Store away from oxidizers. Store away from acids. Keep container closed when not in use.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits

Substances	CAS Number	ACGIH TLV-TWA	OSHA PEL-TWA
Ethoxylated alkyl amines	Proprietary	Not applicable	Not applicable
Rosin amines	61790-47-4	Not applicable	Not applicable

Appropriate engineering controls**Engineering Controls**

Use in a well ventilated area.

Personal Protective Equipment (PPE)**Respiratory Protection**

Organic vapor respirator.

Hand Protection

Impervious rubber gloves.

Skin Protection

Rubber apron.

Eye Protection

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

Other Precautions

Eyewash fountains and safety showers must be easily accessible.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical State: Liquid

Odor: Mild

Color: Light yellow to amber

Odor Threshold: No information available.

Property**Remarks/ Method****Values**

pH:

10-11

pH Concentration of Solution:

No information available.

Melting Point/Range

No information available

Freezing Point/Range (C):

No information available

Boiling Point/Range (C):

No information available.

Flash Point/Range (C):

No information available.

Flash Point Method:

No information available.

Autoignition Temperature (C):

No information available.

Flammability Limits in Air - Lower (%):

No information available.

Flammability Limits in Air - Upper (%):

No information available.

Evaporation Rate (Butyl Acetate=1):

No information available.

Vapor Pressure @ 20 C (mmHg):

No information available.

Vapor Density (Air=1):

No information available.

Specific Gravity @ 20 C (Water=1):

1.03

Solubility in Water (g/100ml):

Soluble

9. PHYSICAL AND CHEMICAL PROPERTIES

Solubility in other solvents	No information available.
Partition Coefficient/n-Octanol/Water:	No information available.
Decomposition Temperature (C):	No information available.
Viscosity	No information available
Explosive Properties	No information available
Oxidizing Properties	No information available

Other information

Molecular Weight (g/mole):	No information available.
VOC Content (%)	No information available

10. STABILITY AND REACTIVITY

Conditions of Reactivity

Conditions to Avoid

Keep away from heat, sparks and flame.

Hazardous Polymerization:

Will Not Occur

Chemical Stability

Stable

Sensitivity to Static Discharge

Not available

Sensitivity to Mechanical Impact

Not available

Incompatible Materials

Strong oxidizers. Strong acids.

Hazardous Decomposition Products

Oxides of nitrogen. Carbon monoxide and carbon dioxide.

11. TOXICOLOGICAL INFORMATION

Routes of entry

Eye or skin contact, inhalation.

Information on Toxicological Effects

Acute effects from exposure

Inhalation

May cause respiratory irritation.

Eye Contact

May cause eye irritation.

Skin Contact

May cause skin defatting with prolonged exposure. Prolonged or repeated contact may cause skin irritation.

Ingestion

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

Chronic effects from exposure

Chronic Effects/Carcinogenicity

May contain ethylene oxide in the headspace of the drum. Ethylene oxide is a cancer and reproductive hazard. Amines may form nitrosamines, a suspect carcinogen, if product is mixed with nitrates, nitrites, nitrogen oxides or other nitrosamines.

Irritancy of product

Irritation

May cause skin and eye irritation

Sensitization of product

11. TOXICOLOGICAL INFORMATION

Sensitization	Not confirmed to cause skin or respiratory sensitization.
Mutagenicity Mutagenic Effects	Not regarded as mutagenic
Carcinogenicity Carcinogenic Effects	No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC, NTP, or OSHA.
Reproductive Toxicity Reproductive Toxicity	This product does not contain any known or suspected reproductive hazards
Teratogenicity/embryotoxicity Teratogenic	Not a confirmed teratogen or embryotoxin.
Toxicologically synergistic material	Not available
Acute Toxicity	

Substances	LD50 Oral	LD50 Dermal	LC50 Inhalation
Ethoxylated alkyl amines	No data available	No data available	No data available
Rosin amines	No data available	No data available	No data available

12. ECOLOGICAL INFORMATION

Toxicity **Ecotoxicity Effects**

Substances	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Ethoxylated alkyl amines	No information available	No information available	No information available	No information available
Rosin amines	No information available	No information available	No information available	No information available

Persistence and degradability No information available

Bioaccumulative potential No information available

Mobility in soil No information available

Results of PBT and vPvB assessment No information available.

Other adverse effects **Endocrine Disruptor Information**

This product does not contain any known or suspected endocrine disruptors

13. DISPOSAL CONSIDERATIONS

Disposal Method	Disposal should be made in accordance with federal, state, and local regulations.
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Contaminated Packaging

Follow all applicable national or local regulations.

14. TRANSPOR INFORMATION**Canadian TDG**

UN Number: Not restricted.
UN Proper Shipping Name: Not restricted
Transport Hazard Class(es): Not applicable

IATA/ICAO

UN Number: Not restricted.
UN Proper Shipping Name: Not restricted
Transport Hazard Class(es): Not applicable

IMDG/IMO

UN Number: Not restricted.
UN Proper Shipping Name: Not restricted
Transport Hazard Class(es): Not applicable

Special Precautions for User

None

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

15. REGULATORY INFORMATION

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

Canadian Regulations

Canadian DSL Inventory
WHMIS Hazard Class

All components listed on inventory or are exempt.
D2B Toxic Materials



WHMIS Symbol(s)

US Regulations

US TSCA Inventory

All components listed on inventory or are exempt.

16. OTHER INFORMATION**Preparation Information**

Prepared By

Chemical Compliance
Telephone: 1-580-251-4335
e-mail: fdunexchem@halliburton.com

Revision Date:

23-Apr-2013

16. OTHER INFORMATION

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

Not applicableNot applicable

Additional Information

For additional information on the use of this product, contact your local Halliburton representative.

For questions about the Safety Data Sheet for this or other Halliburton products, contact Chemical Compliance at 1-580-251-4335.

Key or legend to abbreviations and acronyms

WHMIS: Workplace Hazardous Materials Information System

Key literature references and sources for data

www.ChemADVISOR.com/

Disclaimer Statement

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*****END OF MSDS*****