

MATERIAL SAFETY DATA SHEET

Product Trade Name: CAI-108

Revision Date: 24-Sep-2013

Revision Number: 8

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier

Product Trade Name: CAI-108
Synonyms: None
Chemical Family: Alcohol
Internal ID Code: HM005556

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
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2. HAZARD(S) IDENTIFICATION

WHMIS Classification

WHMIS Hazard Class: B2 Flammable Liquids
D1A Very Toxic Materials
D2B Toxic Materials
E Corrosive Material

WHMIS Symbol(s)



Summary of hazards of the product

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

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substances	CAS Number	PERCENT (w/w)	HMIRA Registry Number	Filing Date
Propargyl alcohol	107-19-7	30 - 60%	Not applicable	Not applicable

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 and skin burns. May be fatal if swallowed.

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

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

Remove ignition sources and work with non-sparking tools. 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

Keep container closed when not in use. Keep from heat, sparks, and open flames. Store in a cool, dry location. Store in a well ventilated area. Store away from acids. Store away from alkalis.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits

Exposure Limits

Substances	CAS Number	ACGIH TLV-TWA	OSHA PEL-TWA
Propargyl alcohol	107-19-7	TWA: 1 ppm	Not applicable

Appropriate engineering controls

Engineering Controls

Use in a well ventilated area.

Personal Protective Equipment (PPE)

Respiratory Protection

Organic vapor respirator.

Hand Protection

Butyl 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: Clear

Odor Threshold: No information available

Property

Remarks/ - Method

pH:

Values

2.32

pH Concentration of Solution:

No information available.

Freezing Point/Range

No information available. °C

Melting Point/Range

No information available.

Boiling Point/Range (C):

No information available.

Flash Point/Range (C):

54

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):

0.994

Solubility in Water (g/100ml):

Soluble

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
Hazardous Polymerization:**Keep away from heat, sparks and flame.
Will Not Occur**Chemical Stability**
Stable**Sensitivity to Static Discharge**
Not available**Sensitivity to Mechanical Impact**
Not available**Incompatible materials**
Strong oxidizers. Strong acids. Contact with alkalis.**Hazardous Decomposition Products**
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	Causes severe eye irritation which may damage tissue.
Skin Contact	Causes severe skin irritation. May cause skin burns. Harmful if absorbed through the skin.
Ingestion	May be fatal if swallowed.

Chronic effects from exposure**Irritancy of product**
IrritationCorrosive to eyes
Corrosive to skin**Sensitization of product**
Sensitization

Not confirmed to cause skin or respiratory sensitization.

Mutagenicity
Mutagenic Effects

Contains no ingredient listed as a mutagen

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

Not a confirmed reproductive toxicant.

Teratogenicity/embryotoxicity
Teratogenic

Not a confirmed teratogen or embryotoxin.

Toxicologically synergistic material Not available**Acute Toxicity**

Substances	CAS Number	LD50 Oral	LD50 Dermal	LC50 Inhalation
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Propargyl alcohol	107-19-7	20 mg/kg (Rat) 20-50 mg/kg (Rat) 93-110 mg/kg (Rat) 54-55 mg/kg (Rat)	16 mg/kg (Rabbit) 88 mg/kg (Rabbit)	600 ppm (Rat) 4 h 520 ppm (Rat) 4 h
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12. ECOLOGICAL INFORMATION

Toxicity

Ecotoxicity Effects

Substances	CAS Number	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Propargyl alcohol	107-19-7	No information available	LC50: 1.49-1.56 mg/L (Pimephales promelas)	No information available	EC50:32 mg/L (Daphnia magna)

Persistence and Degradability

No information available

Bioaccumulation 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.

Contaminated Packaging Follow all applicable national or local regulations.

14. TRANSPORT INFORMATION

Canadian TDG

UN Number: UN2929,
UN Proper Shipping Name: Toxic Liquid, Flammable, Organic, N.O.S.
Transport Hazard Class(es): , 6.1
Subsidiary Hazard: , (3)
Packing Group: , II
EMS: EmS F-E, S-D

IATA/ICAO

UN Number: UN2929,
UN Proper Shipping Name: Toxic Liquid, Flammable, Organic, N.O.S.
Transport Hazard Class(es): , 6.1
Subsidiary Hazard: , (3)
Packing Group: , II

IMDG/IMO

UN Number: UN2929,

UN Proper Shipping Name:	Toxic Liquid, Flammable, Organic, N.O.S.
Transport Hazard Class(es):	, 6.1
Subsidiary Hazard:	, (3)
Packing Group:	, II
EMS:	EmS F-E, S-D

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 All components listed on inventory or are exempt.

WHMIS Hazard Class

B2 Flammable Liquids
D1A Very Toxic Materials
D2B Toxic Materials
E Corrosive Material

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: 24-Sep-2013

Not 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*****