

# MATERIAL SAFETY DATA SHEET

**Product Trade Name:** HAI-GE ACID INHIBITOR

**Revision Date:** 03-Jan-2012

## 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**Product Trade Name:** HAI-GE ACID INHIBITOR  
**Synonyms:** None  
**Chemical Family:** Blend  
**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  
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## 2. COMPOSITION/INFORMATION ON INGREDIENTS

Substances	CAS Number	PERCENT	ACGIH TLV-TWA	OSHA PEL-TWA
Dipropylene glycol monomethyl ether	34590-94-8	10 - 30%	100 ppm (S)	100 ppm (S)
Propargyl alcohol	107-19-7	5 - 10%	1 ppm S	Not applicable
Hexamethylenetetramine	100-97-0	1 - 5%	Not applicable	Not applicable

## 3. HAZARDS IDENTIFICATION

**Hazard Overview** May cause eye, skin, and respiratory burns. May cause headache, dizziness, and other central nervous system effects. May be absorbed through the skin. May be harmful if swallowed. May cause allergic skin and respiratory reaction. Flammable.

## 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. Remove contaminated clothing and laundry before reuse. Remove contaminated shoes and discard.

**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** Probable mucosal damage may contraindicate the use of gastric lavage.

## 5. FIRE FIGHTING MEASURES

Flash Point/Range (F):	100
Flash Point/Range (C):	37
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** Use water spray to cool fire exposed surfaces. Closed containers may explode in fire. Fight fire from a safe distance and from a protected location. Avoid spraying water directly into storage containers due to danger of boilover.

**Special Protective Equipment for Fire-Fighters** Full protective clothing and approved self-contained breathing apparatus required for fire fighting personnel.

**NFPA Ratings:** Health 3, Flammability 3, Reactivity 0

**HMS Ratings:** Health 3, Flammability 3, Physical Hazard 0

## 6. ACCIDENTAL RELEASE MEASURES

**Personal Precautionary Measures** Use only competent persons for cleanup. 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. Remove ignition sources and work with non-sparking tools. Contain spill with sand or other inert materials. Scoop up and remove.

## 7. HANDLING AND STORAGE

**Handling Precautions** Avoid contact with eyes, skin, or clothing. Avoid breathing vapors. Do NOT consume food, drink, or tobacco in contaminated areas. Wash hands after use. Launder contaminated clothing before reuse. Ground and bond containers when transferring from one container to another.

**Storage Information** Store away from oxidizers. Keep from heat, sparks, and open flames. Keep container closed when not in use. Product has a shelf life of 24 months.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Engineering Controls** Use in a well ventilated area. Local exhaust ventilation should be used in areas without good cross ventilation.

**Respiratory Protection** Organic vapor/acid gas respirator. In high concentrations, supplied air respirator or a self-contained breathing apparatus.

**Hand Protection** Impervious rubber gloves.

**Skin Protection** Full protective chemical resistant clothing. Rubber boots.

**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

Physical State:	Liquid
Color:	Clear amber
Odor:	Acetylenic
pH:	7.2
Specific Gravity @ 20 C (Water=1):	1.027
Density @ 20 C (lbs./gallon):	8.55
Bulk Density @ 20 C (lbs/ft3):	Not Determined
Boiling Point/Range (F):	Not Determined
Boiling Point/Range (C):	Not Determined
Freezing Point/Range (F):	10
Freezing Point/Range (C):	-12
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
Viscosity, Dynamic @ 20 C (centipoise):	Not Determined
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
Hazardous Polymerization:	Will Not Occur
Conditions to Avoid	None known.
Incompatibility (Materials to Avoid)	Avoid contact with acidic, basic or oxidizing agents.
Hazardous Decomposition Products	Oxides of sulfur. Carbon monoxide and carbon dioxide.
Additional Guidelines	Not Applicable

## 11. TOXICOLOGICAL INFORMATION

Principle Route of Exposure	Eye or skin contact, inhalation.
Inhalation	Causes severe respiratory burns. May cause central nervous system depression including headache, dizziness, drowsiness, incoordination, slowed reaction time, slurred speech, giddiness and unconsciousness. May cause chemical pneumonia. May cause lungs to fill with fluids. May cause allergic respiratory reaction.
Skin Contact	Causes severe burns. May be absorbed through the skin and produce effects similar to those caused by inhalation and/or ingestion. May cause an allergic skin reaction.
Eye Contact	Causes severe eye burns.
Ingestion	Causes burns of the mouth, throat and stomach. May cause central nervous system depression including headache, dizziness, drowsiness, muscular weakness, incoordination, slowed reaction time, fatigue blurred vision, slurred speech, giddiness, tremors and convulsions.

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<b>Aggravated Medical Conditions</b>	Skin disorders.
<b>Chronic Effects/Carcinogenicity</b>	Prolonged or repeated exposure may cause liver, kidney and lung effects.
<b>Other Information</b>	None known.

#### **Toxicity Tests**

<b>Oral Toxicity:</b>	Not determined
<b>Dermal Toxicity:</b>	LD50: 16 mg/kg (Rabbit) - Propargyl Alcohol LD50: 9500 mg/kg (Rabbit) - Dipropylene Glycol Monomethyl Ether
<b>Inhalation Toxicity:</b>	Not determined
<b>Primary Irritation Effect:</b>	Not determined
<b>Carcinogenicity</b>	Not determined
<b>Genotoxicity:</b>	Not determined
<b>Reproductive / Developmental Toxicity:</b>	Not determined

## **12. ECOLOGICAL INFORMATION**

<b>Mobility (Water/Soil/Air)</b>	Not determined
<b>Persistence/Degradability</b>	Not determined
<b>Bio-accumulation</b>	Not determined

#### **Ecotoxicological Information**

<b>Acute Fish Toxicity:</b>	Not determined
<b>Acute Crustaceans Toxicity:</b>	Not determined
<b>Acute Algae Toxicity:</b>	Not determined

<b>Chemical Fate Information</b>	Not determined
<b>Other Information</b>	Not applicable

## **13. DISPOSAL CONSIDERATIONS**

<b>Disposal Method</b>	Disposal should be made in accordance with federal, state, and local regulations.
<b>Contaminated Packaging</b>	Follow all applicable national or local regulations.

## **14. TRANSPORT INFORMATION**

#### **Land Transportation**

##### **DOT**

UN1993, Flammable Liquid, N.O.S. (Contains Propargyl Alcohol), 3, III, (37.8 C)  
NAERG 128

##### **Canadian TDG**

Flammable Liquid, N.O.S.(Contains Propargyl Alcohol), 3, UN1993, III, (37.8 C)

## ADR

UN1993,Flammable Liquid, N.O.S.(Contains Propargyl Alcohol), 3, III

## Air Transportation

### ICAO/IATA

UN1993,Flammable Liquid, N.O.S., 3, III  
(Contains Propargyl Alcohol)

## Sea Transportation

### IMDG

UN1993,Flammable Liquid, N.O.S.(Contains Propargyl Alcohol), 3, III, (37.8 C)  
EmS F-E, S-E

## Other Transportation Information

Labels: Flammable Liquid

## 15. REGULATORY INFORMATION

### US Regulations

<b>US TSCA Inventory</b>	All components listed on inventory or are exempt.
<b>EPA SARA Title III Extremely Hazardous Substances</b>	Not applicable
<b>EPA SARA (311,312) Hazard Class</b>	Fire Hazard Acute Health Hazard Chronic Health Hazard
<b>EPA SARA (313) Chemicals</b>	This product contains toxic chemical(s) listed below which is(are) subject to the reporting requirements of Section 313 of Title III of SARA and 40 CFR Part 372: Propargyl Alcohol//107-19-7 Glycol Ethers//100-97-0
<b>EPA CERCLA/Superfund Reportable Spill Quantity</b>	EPA Reportable Spill Quantity is 1205 Gallons based on Propargyl alcohol (CAS: 107-19-7).
<b>EPA RCRA Hazardous Waste Classification</b>	If product becomes a waste, it does meet the criteria of a hazardous waste as defined by the US EPA, because of:  Ignitability D001
<b>California Proposition 65</b>	All components listed do not apply to the California Proposition 65 Regulation.
<b>MA Right-to-Know Law</b>	One or more components listed.
<b>NJ Right-to-Know Law</b>	One or more components listed.
<b>PA Right-to-Know Law</b>	One or more components listed.

## Canadian Regulations

Canadian DSL Inventory	All components listed on inventory or are exempt.
WHMIS Hazard Class	B2 Flammable Liquids E Corrosive Material D1B 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\*\*\***