

## SAFETY DATA SHEET

### HAI-303

Revision Date: 12-Apr-2013

Revision Number: 10

#### 1. Product and Company Identification

##### Product Name

Product Trade Name: HAI-303

##### Other Names

Synonyms: None  
Product Code: HM005905

##### Recommended Use

Recommended Use: Corrosion Inhibitor  
Uses Advised Against: No information available

##### Company Name, Address and Contact Details

Manufacturer/Supplier: Halliburton New Zealand  
1 Paraite Rd,  
Bell Block, New Plymouth  
New Zealand Registration No.: 824207

E-Mail address: fdunexchem@halliburton.com

Emergency Telephone Number: +64-6-7559274

New Zealand National Poisons Centre: 0800 764 766 (24 hours)

#### 2. Hazard(s) Identification

##### Statement of Hazardous Nature

Classified as hazardous according to criteria in the Hazardous Substances (Minimum Degrees of Hazard) Regulation 2001; Classified as dangerous good according to NZS 5433:2012, UN, IMDG or IATA

##### Classification

HSNO Classification: 3.1C Flammable Liquids - Medium hazard  
6.1D (Oral) Acutely Toxic Substances  
6.1E (Dermal) Acutely Toxic Substances  
6.3A Irritating to the skin  
8.3A Corrosive to ocular tissue  
6.5B Contact sensitisers  
6.8B Human reproductive or developmental toxicants  
6.9A Toxic to human target organs or systems  
9.1A Very ecotoxic in the aquatic environment  
9.2A Very ecotoxic in the soil environment  
9.3C Harmful to terrestrial vertebrates

## 2. Hazard(s) Identification

### Hazard and Precautionary Statements

#### Hazard Pictograms



#### Signal Word

Danger

#### Hazard Statements

H226 - Flammable liquid and vapor  
 H318 - Causes serious eye damage  
 H302 - Harmful if swallowed  
 H313 - May be harmful in contact with skin  
 H315 - Causes skin irritation  
 H317 - May cause an allergic skin reaction  
 H361 - Suspected of damaging fertility or the unborn child  
 H400 - Very toxic to aquatic life  
 H421 - Very toxic to the soil environment.  
 H432 - Toxic to the terrestrial vertebrates.

#### Precautionary Statements

#### Prevention

P101 - If medical advice is needed, have product container or label at hand  
 P102 - Keep out of reach of children  
 P103 - Read label before use  
 P104 - Read Safety Data Sheet before use.  
 P201 - Obtain special instructions before use  
 P202 - Do not handle until all safety precautions have been read and understood  
 P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking  
 P233 - Keep container tightly closed  
 P240 - Ground/Bond container and receiving equipment  
 P241 - Use explosion-proof electrical/ventilating/lighting/equipment  
 P242 - Use only non-sparking tools  
 P243 - Take precautionary measures against static discharge  
 P261 - Avoid breathing dust/fume/gas/mist/vapors/spray  
 P264 - Wash face, hands and any exposed skin thoroughly after handling  
 P270 - Do not eat, drink or smoke when using this product  
 P272 - Contaminated work clothing should not be allowed out of the workplace  
 P281 - Use personal protective equipment as required

## 2. Hazard(s) Identification

**Response**  
 P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
 P310 - Immediately call a POISON CENTER or doctor/physician  
 P302 + P352 - IF ON SKIN: Wash with plenty of soap and water  
 P332 + P313 - If skin irritation occurs: Get medical advice/attention  
 P362 - Take off contaminated clothing and wash before reuse  
 P301+ P312 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell  
 P330 - Rinse mouth  
 P331 - Do NOT induce vomiting  
 P308 + P313 - IF exposed or concerned: Get medical advice/attention  
 P370 + P 378 - In case of fire: Use CO2, dry chemical, or foam  
 P391 - Collect spillage

**Storage**  
 P405 - Store locked up  
 P403 + P235 - Store in a well-ventilated place. Keep cool

**Disposal**  
 P501 - Dispose of contents/container to an approved incineration plant

### Contains

Substances	CAS Number	Substance HSNO Classification
Methanol	67-56-1	3.1D 6.1C 6.4A 6.8B 6.9A 9.3C
Diethylene glycol	111-46-6	6.1E 6.9B
Cinnamaldehyde	104-55-2	3.1D 6.1 6.3A 6.5B 6.8B 9.1A 9.2A 9.3C

### Other Hazards

None known

## 3. Composition and Information on Ingredients

Substances	CAS Number	PERCENT
Methanol	67-56-1	10 - 30%
Diethylene glycol	111-46-6	30 - 60%
Cinnamaldehyde	104-55-2	30 - 60%

## 4. First-Aid Measures

### Requirements for First Aid or Medical Care

**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.

#### 4. First-Aid Measures

<b>Eyes</b>	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.
<b>Skin</b>	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.
<b>Ingestion</b>	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. Get immediate medical attention.

#### **Workplace Facilities Required**

None

#### **Relation to Health Effect**

#### **Most Important Symptoms/Effects**

No information available

#### **Medical Attention and Special Treatment**

#### **Notes to Physician**

Treat symptomatically

#### 5. Fire-Fighting Measures

#### **Type of Hazard**

#### **Flammability Hazard**

Flammable Liquid

#### **Extinguishing media**

#### **Suitable Extinguishing Media**

Carbon dioxide, dry chemical, foam.

#### **Extinguishing media which must not be used for safety reasons**

None known.

#### **HAZCHEM Code**

**Hazchem Code:** 2WE

#### **Special Protective Equipment and Precautions for Fire Fighters**

#### **Special Protective Equipment for Fire-Fighters**

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

#### **Special Exposure Hazards**

May be ignited by heat, sparks or flames. Use water spray to cool fire exposed surfaces. Closed containers may explode in fire. Decomposition in fire may produce toxic gases. Runoff to sewer may cause fire or explosion hazard.

#### 6. Spillage, Accidental Release Measures

#### **Personal precautions, protective equipment and emergency procedures**

Use appropriate protective equipment. Wear self-contained breathing apparatus in enclosed areas.

See Section 12 for additional information

#### **Environmental precautions**

Prevent from entering sewers, waterways, or low areas.

#### **Methods and material for containment and cleaning up**

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.

**Reference to other sections**

See Section 12 for additional information.

## 7. Handling and Storage

**Precautions for Safe Handling****Handling Precautions**

Avoid contact with eyes, skin, or clothing. Avoid breathing vapors. Wash hands after use. Launder contaminated clothing before reuse. Ground and bond containers when transferring from one container to another.

**Handling Practices****Hygiene Measures**

Handle in accordance with good industrial hygiene and safety practice

**Approved Handlers**

This product does NOT require an approved handler.

**Conditions for safe storage, including any incompatibilities**

Store away from oxidizers. Keep from heat, sparks, and open flames. Store in a well ventilated area. Store locked up. Keep container closed when not in use. Product has a shelf life of 60 months.

**Product is incompatible with:** Product is incompatible with: Class 1 (explosives)  
 Class 2 (flammable gases, aerosols)  
 Class 3.2 (liquid desensitised explosives)  
 Class 4 (readily combustible, self-reactive, solid desensitised explosives, spontaneously combustible, dangerous when wet)  
 Class 5 (oxidisers, organic peroxides)

**Store Site Requirements**

No special controls required

**Packaging**

No special packaging required

## 8. Exposure Controls and Personal Protection

**Workplace Exposure Standards**

Substances	CAS Number	New Zealand WES	ACGIH TLV-TWA
Methanol	67-56-1	STEL: 250 ppm STEL: 328 mg/m <sup>3</sup> TWA: 200 ppm TWA: 262 mg/m <sup>3</sup>	TWA: 200 ppm STEL: 250 ppm
Diethylene glycol	111-46-6	TWA: 23 ppm TWA: 101 mg/m <sup>3</sup>	Not applicable
Cinnamaldehyde	104-55-2	Not applicable	Not applicable

**Engineering Controls****Engineering Controls**

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

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

Positive pressure self-contained breathing apparatus if methanol is released.

<b>Hand Protection</b>	Impervious rubber gloves.
<b>Skin Protection</b>	Rubber apron.
<b>Eye Protection</b>	Chemical goggles; also wear a face shield if splashing hazard exists.
<b>Other Precautions</b>	Eyewash fountains and safety showers must be easily accessible.
<b>Hygiene Measures</b>	Handle in accordance with good industrial hygiene and safety practice

## 9. Physical and Chemical Properties

### Information on basic physical and chemical properties

<b>Physical State:</b>	Liquid	<b>Color:</b>	Yellow-orange
<b>Odor:</b>	Cinnamon	<b>Odor Threshold:</b>	No information available

<u>Property</u>	<u>Values</u>
<u>Remarks/ Method</u>	
<b>pH:</b>	6.85 (10%)
<b>Melting Point/Range</b>	No data available
<b>Freezing Point/Range (C):</b>	-21
<b>Boiling Point/Range</b>	No data available
<b>Flash Point</b>	28.9°C
PMCC	
<b>Evaporation rate</b>	No data available
<b>Vapor Pressure</b>	No data available
<b>Vapor Density</b>	No data available
<b>Specific Gravity</b>	1.015
<b>Water Solubility</b>	Soluble in water
<b>Solubility in other solvents</b>	No data available
<b>Partition coefficient: n-octanol/water</b>	No data available
<b>Autoignition Temperature</b>	No data available
<b>Decomposition Temperature</b>	No data available
<b>Viscosity</b>	No data available
<b>Explosive Properties</b>	No information available
<b>Oxidizing Properties</b>	No information available
<b>Other information</b>	
<b>VOC Content (%)</b>	No data available

## 10. Stability and Reactivity

### Chemical Stability

Stable

### Conditions to Avoid

Keep away from heat, sparks and flame.

### Incompatible Materials

Strong oxidizers.

**Product is incompatible with:** Product is incompatible with: Class 1 (explosives)  
 Class 2 (flammable gases, aerosols)  
 Class 3.2 (liquid desensitised explosives)  
 Class 4 (readily combustible, self-reactive, solid desensitised explosives, spontaneously combustible, dangerous when wet)  
 Class 5 (oxidisers, organic peroxides)

### Hazardous Decomposition Products

Ammonia. Oxides of nitrogen. Hydrocarbons. Carbon monoxide and carbon dioxide.

### Hazardous Reactions

**Hazardous Polymerization:** Will Not Occur

## 11. Toxicological Information

### Health Effect from Likely Routes of Exposure

#### Acute Toxicity

<b>Product Information</b>	Based on the collective toxicity of product ingredients, the mixture should be considered to cause the following:
<b>Inhalation</b>	May cause respiratory irritation. May cause central nervous system depression including headache, dizziness, drowsiness, incoordination, slowed reaction time, slurred speech, giddiness and unconsciousness.
<b>Eye Contact</b>	Causes severe eye irritation which may damage tissue.
<b>Skin Contact</b>	May cause skin irritation. May be absorbed through the skin and produce effects similar to those caused by inhalation and/or ingestion. May cause an allergic skin reaction.
<b>Ingestion</b>	May be fatal or cause blindness if swallowed. 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. May cause liver and kidney damage.

**Chronic Effects/Carcinogenicity** Prolonged or repeated exposure may cause eye, blood, lung, liver, kidney, heart, central nervous system and spleen damage.

#### Toxicity Data

Substances	LD50 Oral	LD50 Dermal	LC50 Inhalation
Methanol	5628 mg/kg; 300mg/kg	15800 mg/kg ; 393 mg/kg	64000 ppm 4 h; 83.2 mg/L 4 h; 10 mg/L
Diethylene glycol	12565 mg/kg; 3300 mg/kg	11890 mg/kg ( Rabbit )	No data available
Cinnamaldehyde	2200 mg/kg; 1160 mg/kg	2000 mg/kg ( Rabbit ) 2000 mg/kg ( Rat )	No data available

## 12. Ecological Information

### Toxicity Ecotoxicity Effects

#### Product Ecotoxicity Data

No data available

#### Substance Ecotoxicity Data

Substances	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Methanol	No information available	LC50: 28200 mg/l (Pimephales promelas)	No information available	No information available
Diethylene glycol	No information available	LC50: 75200 mg/L (Pimephales promelas)	No information available	EC50:84000 mg/L ( Daphnia magna)
Cinnamaldehyde	EC50: 0.13 mg/L (Chlorella vulgaris)	No information available	No information available	No information available

#### Persistence and degradability

Not readily biodegradable

#### Bioaccumulative potential

No information available

Substances	Log Pow
Methanol	-0.77

**Mobility in soil**

No information available

**Ecotoxicity Hazard Statements**

Very toxic to aquatic life

**Other adverse effects****Endocrine Disruptor Information**

This product does not contain any known or suspected endocrine disruptors

<b>13. Disposal Considerations</b>
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**Waste treatment methods****Disposal Method**

Incineration recommended in approved incinerator according to federal, state, and local regulations. Substance should NOT be deposited into a sewage facility.

**Contaminated Packaging**

Follow all applicable national or local regulations. Contaminated packaging may be disposed of by: rendering packaging incapable of containing any substance, or treating packaging to remove residual contents, or treating packaging to make sure the residual contents are no longer hazardous, or by disposing of packaging into commercial waste collection.

<b>14. Transport Information</b>
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**IMDG/IMO**

**UN Number:** UN1993,  
**UN Proper Shipping Name:** Flammable Liquid, N.O.S.  
**Transport Hazard** , 3  
**Class(es):**  
**Packing Group:** , III  
**EMS:** EmS F-E, S-E

**NZ 5433.1999**

**UN Number:** UN1993,  
**UN Proper Shipping Name:** Flammable Liquid, N.O.S.  
**Transport Hazard** , 3  
**Class(es):**  
**Packing Group:** , III

**IATA/ICAO**

**UN Number:** UN1993,  
**UN Proper Shipping Name:** Flammable Liquid, N.O.S.  
**Transport Hazard** , 3  
**Class(es):**  
**Packing Group:** , III

**Special Precautions for User** None**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not applicable

<b>15. Regulatory Information</b>
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**New Zealand Inventory of Chemicals**

All components listed on inventory or are exempt.

**HSNO Approval Number**

HSR002548

**15. Regulatory Information**

<b>Group Name</b>	Corrosive Inhibitor (Flammable HSR002548)
<b>HSNO Controls</b>	Refer to the NZ EPA website for more information: <a href="http://www.epa.govt.nz">http://www.epa.govt.nz</a>
<b>Approved Handlers</b>	Not Applicable
<b>Poisons Schedule:</b>	None Allocated

**16. Other Information****The following sections have been revised since the last issue of this SDS**

Not applicable

<b>Additional Information</b>	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.
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**Key literature references and sources for data**

[www.ChemADVISOR.com/](http://www.ChemADVISOR.com/)  
NZ CCID

<b>Revision Date:</b>	12-Apr-2013
<b>Revision Note</b>	Not applicable

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**End of Safety Data Sheet**