

## SAFETY DATA SHEET

### GEM™ CP

Revision Date: 12-Mar-2014

Revision Number: 13

#### 1. Product and Company Identification

**Product Name**

**Product Trade Name:** GEM™ CP

**Other Names**

**Synonyms:** None

**Product Code:** HM003659

**Recommended Use**

**Recommended Use** Shale stabilizer

**Uses Advised Against** No information available

**Company Name, Address and Contact Details**

**Manufacturer/Supplier** Halliburton New Zealand  
1 Paraita 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; Not Classified as dangerous good according to NZS 5433:2012, UN, IMDG or IATA

**Classification**

6.1D (Inhalation) Acutely Toxic Substances

6.9B Harmful to human target organs or systems

**Hazard and Precautionary Statements**

**Hazard Pictograms**



**Signal Word** Warning

**Hazard Statements** H332 - Harmful if inhaled  
H373 - May cause damage to organs through prolonged or repeated exposure

**Precautionary Statements**

<b>Prevention</b>	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 P260 - Do not breathe dust/fume/gas/mist/vapors/spray P261 - Avoid breathing dust/fume/gas/mist/vapors/spray P271 - Use only outdoors or in a well-ventilated area
<b>Response</b>	P304 + P340 - IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing P312 - Call a POISON CENTER or doctor/physician if you feel unwell P331 - Do NOT induce vomiting P314 - Get medical attention/advice if you feel unwell
<b>Storage</b>	None
<b>Disposal</b>	P501 - Dispose of contents/container to an approved incineration plant

**Contains**

Substances	CAS Number	Substance HSNO Classification
Methyloxirane polymer with oxirane, monbutyl ether	9038-95-3	Not applicable

**2.3 Other Hazards**

None known

### 3. Composition and Information on Ingredients

Substances	CAS Number	PERCENT (w/w)
Methyloxirane polymer with oxirane, monbutyl ether	9038-95-3	60 - 100%

### 4. First-Aid Measures

**Requirements for First Aid or Medical Care**

<b>Inhalation</b>	If inhaled, remove from area to fresh air. Get medical attention if respiratory irritation develops or if breathing becomes difficult.
<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>	Wash with soap and water. Get medical attention if irritation persists.
<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.

**Workplace Facilities Required**

None

**Relation to Health Effect****Most Important Symptoms/Effects**

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

**Medical Attention and Special Treatment****Notes to Physician**

Treat symptomatically

### 5. Fire-fighting measures

**Type of Hazard****Flammability Hazard**

Non-flammable

**5.1 Extinguishing media****Suitable Extinguishing Media**

Water fog, carbon dioxide, foam, dry chemical.

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

None known.

**HAZCHEM Code****Hazchem Code:** None Allocated**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**

Decomposition in fire may produce toxic gases.

**6. Spillage, Accidental Release Measures****6.1 Personal precautions, protective equipment and emergency procedures**

Use appropriate protective equipment.

See Section 8 for additional information

**6.2 Environmental precautions**

Prevent from entering sewers, waterways, or low areas.

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

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

**6.4 Reference to other sections**

See Section 8 and 13 for additional information.

**7. Handling and Storage****7.1 Precautions for Safe Handling****Handling Precautions**

Avoid contact with eyes, skin, or clothing. Avoid breathing mist. Avoid breathing vapors.

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

Handle in accordance with good industrial hygiene and safety practice

**Approved Handlers**

This product does NOT require an approved handler.

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

Store away from oxidizers. Store away from acids. Store away from alkalis. Keep container closed when not in use. Product has a shelf life of 60 months.

**Store Site Requirements**

No special controls required

**Packaging**

No special packaging required

**8. Exposure Controls and Personal Protection****Workplace Exposure Standards****Exposure Limits**

Substances	CAS Number	New Zealand WES	ACGIH TLV-TWA
Methyloxirane polymer with oxirane, monbutyl ether	9038-95-3	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**

Not normally needed. But if significant exposures are possible then the following respirator is recommended:

Organic vapor respirator with a dust/mist filter. (A2P2/P3)

**Hand Protection**

Impervious rubber gloves. Polyvinylchloride gloves. Neoprene 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.

**Hygiene Measures**

Handle in accordance with good industrial hygiene and safety practice

## 9. Physical and Chemical Properties

**9.1 Information on basic physical and chemical properties**

**Physical State:** Liquid

**Color:** Clear light yellow

**Odor:** Mild

**Odor Threshold:** No information available

PropertyValuesRemarks/ - Method**pH:**

5-7.5 (10%)

**Freezing Point/Range**

No data available

**Melting Point/Range**

No data available

**Boiling Point/Range**

No data available

**Flash Point**

> 93 °C PMCC

**Evaporation rate**

< 0.1

**Vapor Pressure**

< 0.01 mmHg

**Vapor Density**

> 1

**Specific Gravity**

1.02

**Water Solubility**

Soluble in water

**Solubility in other solvents**

No data available

**Partition coefficient: n-octanol/water**

0.353

**Autoignition Temperature**

370 °C

**Decomposition Temperature**

No data available

**Viscosity**

No data available

**Explosive Properties**

No information available

**Oxidizing Properties**

No information available

**9.2 Other information****VOC Content (%)**

No data available

## 10. Stability and Reactivity

**10.2 Chemical Stability**

Stable

**10.4 Conditions to Avoid**

None anticipated

**10.5 Incompatible Materials**

Strong oxidizers. Strong acids. Strong alkalis.

**10.6 Hazardous Decomposition Products**

Carbon monoxide and carbon dioxide.

**Hazardous Reactions**

**Hazardous Polymerization:** Will Not Occur

## 11. Toxicological Information

**Health Effect from Likely Routes of Exposure****Acute Toxicity****Inhalation**

May cause mild respiratory irritation.

<b>Eye Contact</b>	May cause mild eye irritation.
<b>Skin Contact</b>	Prolonged or repeated contact may cause slight skin irritation.
<b>Ingestion</b>	Irritation of the mouth, throat, and stomach.

**Chronic Effects/Carcinogenicity** Prolonged or repeated exposure may cause lung damage.

### Toxicity Data

#### Toxicology data for the components

Substances	CAS Number	LD50 Oral	LD50 Dermal	LC50 Inhalation
Methyloxirane polymer with oxirane, monbutyl ether	9038-95-3	12300 µL/kg (Rat) > 4728 mg/kg (Rat)	20 mL/kg (Rabbit) > 21140 mg/kg (Rat)	0.26 mg/L 4H

## 12. Ecological Information

### 12.1 Toxicity

#### Ecotoxicity Effects

#### Product Ecotoxicity Data

No data available

#### Substance Ecotoxicity Data

Substances	CAS Number	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Toxicity to Invertebrates
Methyloxirane polymer with oxirane, monbutyl ether	9038-95-3	EC50: 465 mg/l (Skeletonema costatum)	LC50(96h): 3170 - 11900 mg/L (Pimephales promelas)	No information available	TLM48: 356 mg/l (Acartia tonsa) EC50(48h): 17000 - 19000 mg/L (Daphnia magna)

### 12.2 Persistence and degradability

Not readily biodegradable

### 12.3 Bioaccumulative potential

Substances	Log Pow
Methyloxirane polymer with oxirane, monbutyl ether	0.353

### 12.4 Mobility in soil

No information available

### Ecotoxicity Hazard Statements

None known

### 12.6 Other adverse effects

#### Endocrine Disruptor Information

This product does not contain any known or suspected endocrine disruptors

## 13. Disposal Considerations

### 13.1 Waste treatment methods

#### 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

### IMDG/IMO

<b>UN Number:</b>	Not restricted.
<b>UN Proper Shipping Name:</b>	Not restricted

**Transport Hazard Class(es):** Not applicable

**NZ 5433.1999**

**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

**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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<b>New Zealand Inventory of Chemicals</b>	This product does not comply with NZIOC
<b>HSNO Approval Number</b>	HSR003207
<b>Group Name</b>	Not Applicable
<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

<b>16. Other information, including date of preparation or last revision</b>
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**The following sections have been revised since the last issue of this SDS**

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 literature references and sources for data**

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

**Revision Date:** 12-Mar-2014

**Revision Note**

Not applicable

**Disclaimer Statement**

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**End of Safety Data Sheet**