

# MATERIAL SAFETY DATA SHEET

**Product Trade Name:** GELTONE® II

**Revision Date:** 19-Mar-2014

## 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

**Statement of Hazardous Nature** Hazardous according to the criteria of NOHSC, Non-Dangerous Goods according to the criteria of ADG.

**Manufacturer/Supplier** Halliburton/Baroid Australia Pty. Ltd.  
15 Marriott Road  
Jandakot  
WA 6164  
Australia

ACN Number: 009 000 775  
Telephone Number: 61 (08) 9455 8300  
Fax Number: 61 (08) 9455 5300

**Product Emergency Telephone**  
Australia: 08-64244950  
Papua New Guinea: 05 1 281 575 5000  
New Zealand: 06-7559274

**Fire, Police & Ambulance - Emergency Telephone**  
Australia: 000  
Papua New Guinea: 000  
New Zealand: 111

### Identification of Substances or Preparation

**Product Trade Name:** GELTONE® II  
**Synonyms:** None  
**Chemical Family:** Blend  
**UN Number:** None  
**Dangerous Goods Class:** None  
**Subsidiary Risk:** None  
**Hazchem Code:** None Allocated  
**Poisons Schedule:** None Allocated  
**Application:** Viscosifier

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

## 2. HAZARDS IDENTIFICATION

**Statement of Hazardous Nature** Hazardous according to the criteria of NOHSC, Non-Dangerous Goods according to the criteria of ADG.

## Hazard Overview

May cause mild eye, skin, and respiratory irritation. Organic dust in the presence of an ignition source can be explosive in high concentrations. Good housekeeping practices are required to minimize this potential. Breathing crystalline silica can cause lung disease, including silicosis and lung cancer. Crystalline silica has also been associated with scleroderma and kidney disease.

This product contains quartz, cristobalite, and/or tridymite which may become airborne without a visible cloud. Avoid breathing dust. Avoid creating dusty conditions. Use only with adequate ventilation to keep exposures below recommended exposure limits. Wear a NIOSH certified, European Standard EN 149, or equivalent respirator when using this product. Review the Material Safety Data Sheet (MSDS) for this product, which has been provided to your employer.

## Classification

T - Toxic.  
Crystalline silica is not classified as a carcinogen in EU Council Directives 67/548/EEC and 88/379/EEC.

## Risk Phrases

R49 May cause cancer by inhalation.  
R48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation.

## Safety Phrases

S22 Do not breathe dust.  
S24/25 Avoid contact with skin and eyes.

## HSNO Classification

6.7A Known or presumed human carcinogens  
6.9B Harmful to human target organs or systems

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substances	CAS Number	PERCENT (w/w)	Australia	NOHSC	New Zealand	ACGIH TLV-TWA
					WES	
Crystalline silica, quartz	14808-60-7	1 - 5%	TWA: 0.1 mg/m <sup>3</sup>		TWA: 0.2 mg/m <sup>3</sup>	TWA: 0.025 mg/m <sup>3</sup>
Bis(hydrogenated tallow alkyl) methylamines	61788-63-4	0 - 1%	Not applicable		Not applicable	Not applicable

**Non-Hazardous Substance to Total of 100%**

## 4. FIRST AID MEASURES

**Inhalation** If inhaled, remove from area to fresh air. Get medical attention if respiratory irritation develops or if breathing becomes difficult.

**Skin** Wash with soap and water. Get medical attention if irritation persists.

**Eyes** In case of contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention if irritation persists.

**Ingestion** Under normal conditions, first aid procedures are not required.

**Notes to Physician** Not Applicable

## 5. FIRE FIGHTING MEASURES

**Suitable Extinguishing Media**

All standard fire fighting media

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

None known.

**Special Exposure Hazards**

Organic dust in the presence of an ignition source can be explosive in high concentrations. Good housekeeping practices are required to minimize this potential.

**Special Protective Equipment for Fire-Fighters**

Not applicable.

**6. ACCIDENTAL RELEASE MEASURES****Personal Precautionary Measures**

Use appropriate protective equipment. Avoid creating and breathing dust.

**Environmental Precautionary Measures**

None known.

**Procedure for Cleaning / Absorption**

Collect using dustless method and hold for appropriate disposal. Consider possible toxic or fire hazards associated with contaminating substances and use appropriate methods for collection, storage and disposal.

**7. HANDLING AND STORAGE****Handling Precautions**

This product contains quartz, cristobalite, and/or tridymite which may become airborne without a visible cloud. Avoid breathing dust. Avoid creating dusty conditions. Use only with adequate ventilation to keep exposure below recommended exposure limits. Wear a NIOSH certified, European Standard En 149, or equivalent respirator when using this product. Material is slippery when wet.

**Storage Information**

Store in a cool, dry location. Use good housekeeping in storage and work areas to prevent accumulation of dust. Close container when not in use. Do not reuse empty container. Product has a shelf life of 24 months.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION****Engineering Controls**

Use approved industrial ventilation and local exhaust as required to maintain exposures below applicable exposure limits.

**Respiratory Protection**

Wear a NIOSH certified, European Standard EN 149 (FFP2/FFP3), or equivalent respirator when using this product.

**Hand Protection**

Normal work gloves.

**Skin Protection**

Wear clothing appropriate for the work environment. Dusty clothing should be laundered before reuse. Use precautionary measures to avoid creating dust when removing or laundering clothing.

**Eye Protection**

Wear safety glasses or goggles to protect against exposure.

**Other Precautions**

None known.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

<b>Physical State:</b>	Powder
<b>Color:</b>	Tan
<b>Odor:</b>	Mild
<b>pH:</b>	Not Determined
<b>Specific Gravity @ 20 C (Water=1):</b>	1.6
<b>Density @ 20 C (kg/l):</b>	Not Determined
<b>Bulk Density @ 20 C (kg/M3):</b>	Not Determined
<b>Boiling Point/Range (C):</b>	Not Determined
<b>Freezing Point/Range (C):</b>	Not Determined
<b>Pour Point/Range (C):</b>	Not Determined
<b>Flash Point/Range (C):</b>	Not Determined
<b>Flash Point Method:</b>	Not Determined
<b>Autoignition Temperature (C):</b>	Not Determined
<b>Flammability Limits in Air - Lower (g/m<sup>3</sup>):</b>	Not Determined
<b>Flammability Limits in Air - Lower (%):</b>	Not Determined
<b>Flammability Limits in Air - Upper (g/m<sup>3</sup>):</b>	Not Determined
<b>Flammability Limits in Air - Upper (%):</b>	Not Determined
<b>Vapor Pressure @ 20 C (mmHg):</b>	Not Determined
<b>Vapor Density (Air=1):</b>	Not Determined
<b>Percent Volatiles:</b>	Not Determined
<b>Evaporation Rate (Butyl Acetate=1):</b>	Not Determined
<b>Solubility in Water (g/100ml):</b>	Insoluble
<b>Solubility in Solvents (g/100ml):</b>	Miscible in hydrocarbons
<b>VOCs (g/l):</b>	Not Determined
<b>Viscosity, Dynamic @ 20 C (centipoise):</b>	Not Determined
<b>Viscosity, Kinematic @ 20 C (centistokes):</b>	Not Determined
<b>Partition Coefficient/n-Octanol/Water:</b>	Not Determined
<b>Molecular Weight (g/mole):</b>	Not Determined
<b>Decomposition Temperature (C):</b>	Not Determined

## 10. STABILITY AND REACTIVITY

<b>Stability Data:</b>	Stable
<b>Hazardous Polymerization:</b>	Will Not Occur
<b>Conditions to Avoid</b>	None anticipated
<b>Incompatibility (Materials to Avoid)</b>	Hydrofluoric acid.
<b>Hazardous Decomposition Products</b>	Amorphous silica may transform at elevated temperatures to tridymite (870 C) or cristobalite (1470 C).
<b>Additional Guidelines</b>	Not Applicable

## 11. TOXICOLOGICAL INFORMATION

**Principle Route of Exposure** Eye or skin contact, inhalation.

**Symptoms related to exposure**  
**Acute Toxicity**

**Inhalation**

Inhaled crystalline silica in the form of quartz or cristobalite from occupational sources is carcinogenic to humans (IARC, Group 1). There is sufficient evidence in experimental animals for the carcinogenicity of tridymite (IARC, Group 2A).

Breathing silica dust may cause irritation of the nose, throat, and respiratory passages. Breathing silica dust may not cause noticeable injury or illness even though permanent lung damage may be occurring. Inhalation of dust may also have serious chronic health effects (See "Chronic Effects/Carcinogenicity" subsection below).

**Eye Contact**

May cause eye irritation

**Skin Contact**

May cause skin irritation.

**Ingestion**

Irritation of the mouth, throat, and stomach.

**Chronic Effects/Carcinogenicity**

**Silicosis:** Excessive inhalation of respirable crystalline silica dust may cause a progressive, disabling, and sometimes-fatal lung disease called silicosis. Symptoms include cough, shortness of breath, wheezing, non-specific chest illness, and reduced pulmonary function. This disease is exacerbated by smoking. Individuals with silicosis are predisposed to develop tuberculosis.

**Cancer Status:** The International Agency for Research on Cancer (IARC) has determined that crystalline silica inhaled in the form of quartz or cristobalite from occupational sources can cause lung cancer in humans (Group 1 - carcinogenic to humans) and has determined that there is sufficient evidence in experimental animals for the carcinogenicity of tridymite (Group 2A - possible carcinogen to humans). Refer to IARC Monograph 68, Silica, Some Silicates and Organic Fibres (June 1997) in conjunction with the use of these minerals. The National Toxicology Program classifies respirable crystalline silica as "Known to be a human carcinogen". Refer to the 9th Report on Carcinogens (2000). The American Conference of Governmental Industrial Hygienists (ACGIH) classifies crystalline silica, quartz, as a suspected human carcinogen (A2).

There is some evidence that breathing respirable crystalline silica or the disease silicosis is associated with an increased incidence of significant disease endpoints such as scleroderma (an immune system disorder manifested by scarring of the lungs, skin, and other internal organs) and kidney disease.

**Toxicology data for the components**

Substances	CAS Number	LD50 Oral	LD50 Dermal	LC50 Inhalation
Crystalline silica, quartz	14808-60-7	500 mg/kg ( Rat )	No data available	No data available
Bis(hydrogenated tallow alkyl) methylamines	61788-63-4	> 5000 mg/kg (Rat)	> 2000 mg/kg (Rabbit) (Similar substance)	> 180 mg/L (Rat, aerosol, 1h)

**12. ECOLOGICAL INFORMATION****Ecotoxicological Information****Ecotoxicity Product**

**Acute Fish Toxicity:** LC50(96h): > 1000 mg/l (Scophthalmus maximus juvenile)

**Acute Crustaceans Toxicity:** LC50(48h): > 2000 mg/l (Acartia tonsa)

**Acute Algae Toxicity:** EC50(72h): > 1000 mg/l (Skeletonema costatum)

**Ecotoxicity Substance**

Substances	CAS Number	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Toxicity to Invertebrates
Crystalline silica, quartz	14808-60-7	EC50(72h): 89 mg/L (biomass) (Scenedesmus subspicatus) (similar substance)	LC50(96h): 508 mg/L (Danio rerio) (similar substance)	No information available	LC50(48h): 731 mg/L (Daphnia magna) (similar substance) LC50(48h): 33.5 mg/L (Ceriodaphnia dubia) (similar substance)

Bis(hydrogenated tallow alkyl) methylamines	61788-63-4	No information available	LC50(96h): > 1000 mg/L (Brachydanio rerio)	No information available	EC50(48h): 50 mg/L (Daphnia magna)
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## 12.2 Persistence and degradability

Substances	Persistence and Degradability
Crystalline silica, quartz	The methods for determining biodegradability are not applicable to inorganic substances.
Bis(hydrogenated tallow alkyl) methylamines	Readily biodegradable (100% @ 28d)

## 12.3 Bioaccumulative potential

Bioaccumulation is unlikely

## 12.4 Mobility in soil

No information available

## 12.5 Results of PBT and vPvB assessment

No information available.

## 12.6 Other adverse effects

# 13. DISPOSAL CONSIDERATIONS

**Disposal Method** Bury in a licensed landfill according to federal, state, and local regulations.

**Contaminated Packaging** Follow all applicable national or local regulations.

# 14. TRANSPORT INFORMATION

## Land Transportation

### ADR

Not restricted

## Air Transportation

### ICAO/IATA

Not restricted

## Sea Transportation

### IMDG

Not restricted

## Other Transportation Information

**Labels:** None

# 15. REGULATORY INFORMATION

## Chemical Inventories

**Australian AICS Inventory** Product contains one or more components not listed on inventory.  
**New Zealand Inventory of Chemicals** All components listed on inventory or are exempt.  
**US TSCA Inventory** All components listed on inventory or are exempt.  
**EINECS Inventory** This product, and all its components, complies with EINECS

**Classification** T - Toxic.

Crystalline silica is not classified as a carcinogen in EU Council Directives 67/548/EEC and 88/379/EEC.

**Risk Phrases**

R49 May cause cancer by inhalation.  
R48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation.

**Safety Phrases**

S22 Do not breathe dust.  
S24/25 Avoid contact with skin and eyes.

**16. OTHER INFORMATION**

The following sections have been revised since the last issue of this SDS  
Not applicable

**Contact**

**Australian Poisons Information Centre**

24 Hour Service: - 13 11 26  
Police or Fire Brigade: - 000 (exchange): - 1100

**New Zealand National Poisons Centre**

0800 764 766

**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.

**Disclaimer Statement**

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