# **HALLIBURTON**

# MATERIAL SAFETY DATA SHEET

Product Trade Name: GELTONE® V

Revision Date: 13-Jan-2014

### 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Trade Name: GELTONE® V

Synonyms: None
Chemical Family: Blend
Application: Viscosifier

Manufacturer/Supplier Baroid Fluid Services

Product Service Line of Halliburton

P.O. Box 1675 Houston, TX 77251

Telephone: (281) 871-4000

Emergency Telephone: (281) 575-5000

Prepared By Chemical Compliance

Telephone: 1-580-251-4335

e-mail: fdunexchem@halliburton.com

## 2. COMPOSITION/INFORMATION ON INGREDIENTS

Substances	CAS Number	PERCENT (w/w)	<b>ACGIH TLV-TWA</b>	OSHA PEL-TWA
Isopropanol	67-63-0	1 - 5%	TWA: 200 ppm STEL: 400 ppm	400 ppm
Crystalline silica, quartz	14808-60-7	1 - 5%	TWA: 0.025 mg/m <sup>3</sup>	10 mg/m <sup>3</sup> %SiO2 + 2
Crystalline silica, cristobalite	14464-46-1	0 - 1%	TWA: 0.025 mg/m <sup>3</sup>	1/2 x 10 mg/m <sup>3</sup> /SiO2 + 2
Crystalline silica, tridymite	15468-32-3	0 - 1%	0.05 mg/m <sup>3</sup>	1/2 x <u>10 mg/m</u> <sup>3</sup> _ %SiO2 + 2

More restrictive exposure limits may be enforced by some states, agencies, or other authorities.

### 3. HAZARDS IDENTIFICATION

Hazard Overview 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.

### **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.

In case of contact, immediately flush eyes with plenty of water for at least 15 Eyes

minutes and get medical attention if irritation persists.

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

**Notes to Physician** Not Applicable

#### FIRE FIGHTING MEASURES

Not Determined Flash Point/Range (F): Not Determined Flash Point/Range (C): Flash Point Method: Not Determined **Autoignition Temperature (F):** Not Determined **Autoignition Temperature (C):** Not Determined Flammability Limits in Air - Lower (%): Not Determined Flammability Limits in Air - Upper (%): Not Determined

All standard firefighting media. Fire Extinguishing Media

**Special Exposure Hazards** Not applicable.

**Special Protective Equipment** 

for Fire-Fighters

Not applicable.

**NFPA Ratings:** Health 1, Flammability 0, Reactivity 0 Health 1\*, Flammability 0, Reactivity 0 **HMIS Ratings:** 

### **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.

# 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

Physical State: Powder

Color: Tan Odor: Mild

pH: Not Determined

Specific Gravity @ 20 C (Water=1): 1.6

Density @ 20 C (lbs./gallon): Not Determined

Bulk Density @ 20 C (lbs/ft3): 35- 57

**Boiling Point/Range (F):** Not Determined Not Determined **Boiling Point/Range (C):** Freezing Point/Range (F): Not Determined Freezing Point/Range (C): Not Determined 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): Insoluble

Solubility in Solvents (g/100ml): Miscible in hydrocarbons

VOCs (Ibs./gallon):

Viscosity, Dynamic @ 20 C (centipoise):

Viscosity, Kinematic @ 20 C (centistokes):

Partition Coefficient/n-Octanol/Water:

Molecular Weight (g/mole):

Not Determined

Not Determined

Not Determined

### 10. STABILITY AND REACTIVITY

Stability Data: Stable

Hazardous Polymerization: Will Not Occur

Conditions to Avoid None anticipated

Incompatibility (Materials to

Avoid)

Hydrofluoric acid.

Hazardous Decomposition Products

Amorphous silica may transform at elevated temperatures to tridymite (870 C) or cristobalite (1470 C).

**Additional Guidelines** 

Not Applicable

## 11. TOXICOLOGICAL INFORMATION

**Principle Route of Exposure** 

Eye or skin contact, inhalation.

#### Sympotoms 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 Skin Contact Ingestion May cause mild eye irritation. May cause mild skin irritation.

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

Toxioology data for the compensation							
Substances	CAS Number	LD50 Oral	LD50 Dermal	LC50 Inhalation			
Isopropanol	67-63-0	4396 mg/kg (Rat) 3600 mg/kg (mouse)	12800 mg/kg (Rat) 12870 mg/kg (Rabbit)	72.6 mg/L (Rat) 4 h			
Crystalline silica, quartz	14808-60-7	500 mg/kg (Rat)	No data available	No data available			
Crystalline silica, cristobalite	14464-46-1	No data available	No data available	No data available			
Crystalline silica, tridymite	15468-32-3	No data available	No data available	No data available			

# 12. ECOLOGICAL INFORMATION

### **Ecotoxicological Information**

**Ecotoxicity Product** 

Acute Fish Toxicity: Not determined
Acute Crustaceans Toxicity: Not determined
Acute Algae Toxicity: Not determined

**Ecotoxicity Substance** 

Substances	CAS Number	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Isopropanol	67-63-0	EC50: > 1000 mg/l(Desmodesmus subspicatus)	LC50: 9640 mg/l (Pimephales promelas)	No information available	EC50: 13299 mg/l (Daphnia magna)
Crystalline silica, quartz	14808-60-7	No information available	No information available	No information available	No information available
Crystalline silica, cristobalite	14464-46-1	No information available	No information available	No information available	No information available
Crystalline silica, tridymite	15468-32-3	No information available	No information available	No information available	No information available

### 12.2 Persistence and degradability

No information available

#### 12.3 Bioaccumulative potential

No information available

#### 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**

DOT

Not restricted

#### **Canadian TDG**

Not restricted

**ADR** 

Not restricted

# Air Transportation

#### ICAO/IATA

Not restricted

# **Sea Transportation**

**IMDG** 

Not restricted

# **Other Transportation Information**

Labels: None

# 15. REGULATORY INFORMATION

**US Regulations** 

**US TSCA Inventory** All components listed on inventory or are exempt.

**EPA SARA Title III Extremely Hazardous Substances** 

Not applicable

EPA SARA (311,312) Hazard

**Class** 

Acute Health Hazard Chronic Health Hazard

EPA SARA (313) Chemicals This product does not contain a toxic chemical for routine annual "Toxic Chemical

Release Reporting" under Section 313 (40 CFR 372).

**EPA CERCLA/Superfund Reportable Spill Quantity** 

Not applicable.

**EPA RCRA Hazardous Waste** 

Classification

If product becomes a waste, it does NOT meet the criteria of a hazardous waste

as defined by the US EPA.

**California Proposition 65** The California Proposition 65 regulations apply to this product.

MA Right-to-Know Law One or more components listed.

NJ Right-to-Know Law One or more components listed.

PA Right-to-Know Law One or more components listed.

**Canadian Regulations** 

**Canadian DSL Inventory** All components listed on inventory or are exempt.

WHMIS Hazard Class D2A Very Toxic Materials

Crystalline silica

### 16. OTHER INFORMATION

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.

### **Disclaimer Statement**

This information is furnished without warranty, expressed or implied, as to accuracy or completeness. The information is obtained from various sources including the manufacturer and other third party sources. The information may not be valid under all conditions nor if this material is used in combination with other materials or in any process. Final determination of suitability of any material is the sole responsibility of the user.

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