

## MATERIAL SAFETY DATA SHEET

**Product Trade Name:**           **CoilGlide-Carbonate**

**Revision Date:**                   03-Jan-2013

<b>1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION</b>
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**Product Trade Name:**           CoilGlide-Carbonate  
**Synonyms:**                       None  
**Chemical Family:**               Surfactant  
**Application:**                    Surfactant Gelling Agent

**Manufacturer/Supplier**           Halliburton Energy Services  
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<b>2. COMPOSITION/INFORMATION ON INGREDIENTS</b>
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Substances	CAS Number	PERCENT	ACGIH TLV-TWA	OSHA PEL-TWA
Quaternary amine		60 - 100%	Not applicable	Not applicable
Propylene glycol	57-55-6	10 - 30%	10 mg/m <sup>3</sup>	15 mg/m <sup>3</sup>

<b>3. HAZARDS IDENTIFICATION</b>
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**Hazard Overview**                   May cause eye and skin irritation. May be harmful if swallowed.

<b>4. FIRST AID MEASURES</b>
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**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 launder before reuse.

**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**               Not Applicable

## 5. FIRE FIGHTING MEASURES

Flash Point/Range (F):	219
Flash Point/Range (C):	104
Flash Point Method:	PMCC
Autoignition Temperature (F):	700
Autoignition Temperature (C):	371
Flammability Limits in Air - Lower (%):	2.6
Flammability Limits in Air - Upper (%):	12.5

**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. Decomposition in fire may produce toxic gases. Vapors are heavier than air and may accumulate in low areas. Vapors may travel along the ground to be ignited at distant locations.

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

**NFPA Ratings:** Health 2, Flammability 1, Reactivity 0  
**HMS Ratings:** Health 2, Flammability 1, Physical Hazard 0

## 6. ACCIDENTAL RELEASE MEASURES

**Personal Precautionary Measures** 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. Contain spill with sand or other inert materials. Scoop up and remove.

## 7. HANDLING AND STORAGE

**Handling Precautions** Wash hands after use. Launder contaminated clothing before reuse. Avoid contact with eyes, skin, or clothing. Avoid breathing vapors.

**Storage Information** Store away from acids. Store away from oxidizers. Store in a cool well ventilated area. Keep container closed when not in use.

## 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** If engineering controls and work practices cannot keep exposure below occupational exposure limits or if exposure is unknown, wear a NIOSH certified, European Standard EN 149, or equivalent respirator when using this product. Selection of and instruction on using all personal protective equipment, including respirators, should be performed by an Industrial Hygienist or other qualified professional.

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

Organic vapor respirator with a dust/mist filter.

**Hand Protection** Impervious rubber 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.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical State:</b>	Liquid
<b>Color:</b>	Yellowish
<b>Odor:</b>	Bland
<b>pH:</b>	6 - 8
<b>Specific Gravity @ 20 C (Water=1):</b>	0.986
<b>Density @ 20 C (lbs./gallon):</b>	8.21
<b>Bulk Density @ 20 C (lbs/ft<sup>3</sup>):</b>	Not Determined
<b>Boiling Point/Range (F):</b>	365
<b>Boiling Point/Range (C):</b>	185 <b>Max:</b> < 0 <b>Min:</b> > 0
<b>Freezing Point/Range (F):</b>	28.3
<b>Freezing Point/Range (C):</b>	-2.04
<b>Vapor Pressure @ 20 C (mmHg):</b>	24.6
<b>Vapor Density (Air=1):</b>	2.62
<b>Percent Volatiles:</b>	Not Determined
<b>Evaporation Rate (Butyl Acetate=1):</b>	1.22
<b>Solubility in Water (g/100ml):</b>	Partially soluble
<b>Solubility in Solvents (g/100ml):</b>	Not Determined
<b>VOCs (lbs./gallon):</b>	Not Determined
<b>Viscosity, Dynamic @ 20 C (centipoise):</b>	581 @25C
<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

## 10. STABILITY AND REACTIVITY

<b>Stability Data:</b>	Stable
<b>Hazardous Polymerization:</b>	Will Not Occur
<b>Conditions to Avoid</b>	None known.
<b>Incompatibility (Materials to Avoid)</b>	Strong oxidizers. Reducing agents.
<b>Hazardous Decomposition Products</b>	Oxides of nitrogen. Hydrocarbons. Carbon monoxide and carbon dioxide. Ammonia.
<b>Additional Guidelines</b>	Not Applicable

## 11. TOXICOLOGICAL INFORMATION

<b>Principle Route of Exposure</b>	Eye or skin contact, inhalation.
<b>Inhalation</b>	May cause respiratory irritation.
<b>Skin Contact</b>	Causes severe skin irritation.
<b>Eye Contact</b>	May cause severe eye irritation.
<b>Ingestion</b>	May be harmful if swallowed. May cause stomach discomfort.
<b>Aggravated Medical Conditions</b>	Skin disorders. Lung disorders. Eye ailments.

**Chronic Effects/Carcinogenicity** No data available to indicate product or components present at greater than 1% are chronic health hazards.

**Other Information** None known.

**Toxicity Tests**

**Oral Toxicity:** Not determined

**Dermal Toxicity:** Not determined

**Inhalation Toxicity:** Not determined

**Primary Irritation Effect:** Not determined

**Carcinogenicity** Not determined

**Genotoxicity:** Not determined

**Reproductive /  
Developmental Toxicity:** Not determined

**12. ECOLOGICAL INFORMATION**

**Mobility (Water/Soil/Air)** Not determined

**Persistence/Degradability** Inherently biodegradable

**Bio-accumulation** Not determined

**Ecotoxicological Information**

**Acute Fish Toxicity:** May be highly toxic to aquatic life.

**Acute Crustaceans Toxicity:** Not determined

**Acute Algae Toxicity:** Not determined

**Chemical Fate Information** Not determined

**Other Information** Not applicable

**13. DISPOSAL CONSIDERATIONS**

**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**

**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**

<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>	Acute Health Hazard
<b>EPA SARA (313) Chemicals</b>	This product does not contain a toxic chemical for routine annual "Toxic Chemical Release Reporting" under Section 313 (40 CFR 372).
<b>EPA CERCLA/Superfund Reportable Spill Quantity</b>	Not applicable.
<b>EPA RCRA Hazardous Waste Classification</b>	If product becomes a waste, it does NOT meet the criteria of a hazardous waste as defined by the US EPA.
<b>California Proposition 65</b>	All components listed do not apply to the California Proposition 65 Regulation.
<b>MA Right-to-Know Law</b>	Does not apply.
<b>NJ Right-to-Know Law</b>	Does not apply.
<b>PA Right-to-Know Law</b>	One or more components listed.

### **Canadian Regulations**

<b>Canadian DSL Inventory</b>	All components listed on inventory or are exempt.
<b>WHMIS Hazard Class</b>	D2B 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\*\*\***