HALLIBURTON

MATERIAL SAFETY DATA SHEET

Product Trade Name: DCA-33001

Revision Date: 14-Apr-2014

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Trade Name: DCA-33001
Synonyms: None
Chemical Family: Glycol
Application: Solvent

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)	ACGIH TLV-TWA	OSHA PEL-TWA
Propylene glycol	57-55-6	60 - 100%	10 mg/m ³	15 mg/m ³

3. HAZARDS IDENTIFICATION

Hazard Overview May cause eye, skin, and respiratory irritation. May cause headache, dizziness,

and other central nervous system effects. Repeated overexposure may cause liver

and kidney effects. May be harmful if swallowed.

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 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):

Flash Point/Range (C):

Flash Point Method:

Autoignition Temperature (F):

Flammability Limits in Air - Lower (%):

Flammability Limits in Air - Upper (%):

12.5

Fire Extinguishing Media Water fog, carbon dioxide, foam, dry chemical.

Special Exposure HazardsUse water spray to cool fire exposed surfaces. Decomposition in fire may produce

toxic gases.

Special Protective Equipment

for Fire-Fighters

Full protective clothing and approved self-contained breathing apparatus required

for fire fighting personnel.

NFPA Ratings: Health 0, Flammability 1, Reactivity 0

HMIS Ratings: Health 0, Flammability 1, Physical Hazard 0, PPE: C

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 Avoid contact with eyes, skin, or clothing. Avoid breathing vapors. Wash hands

after use.

Storage Information Store in a cool well ventilated area. Keep container closed when not in use.

Product has a shelf life of 24 months.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls Use in a well ventilated area.

Respiratory Protection Not normally needed. But if significant exposures are possible then the following

respirator is recommended: Organic vapor respirator.

Hand Protection Impervious rubber gloves.

Skin Protection Rubber apron.

Eye Protection Chemical goggles; also wear a face shield if splashing hazard exists.

Other Precautions None known.

DCA-33001 Page 2 of 6

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Liquid

Color: Clear colorless
Odor: Odorless
PH: 6
Specific Gravity @ 20 C (Water=1): 1.038

Density @ 20 C (lbs./gallon): 8.65

Bulk Density @ 20 C (lbs/ft3): Not Determined

Boiling Point/Range (F): 369
Boiling Point/Range (C): 187
Freezing Point/Range (F): -74
Freezing Point/Range (C): -23
Vapor Pressure @ 20 C (mmHg): 0.06
Vapor Density (Air=1): 2.62
Percent Volatiles: 100

Evaporation Rate (Butyl Acetate=1): Not Determined

Solubility in Water (g/100ml): > 10%

Solubility in Solvents (g/100ml):

VOCs (lbs./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 known.

Incompatibility (Materials to

Avoid)

None known.

Hazardous Decomposition

Products

Hydrocarbons. Carbon monoxide and carbon dioxide.

Additional Guidelines Not Applicable

11. TOXICOLOGICAL INFORMATION

Principle Route of Exposure Eye or skin contact, inhalation.

Sympotoms related to exposure

Acute Toxicity

Inhalation May cause respiratory irritation. May cause central nervous system depression including

headache, dizziness, drowsiness, incoordination, slowed reaction time, slurred speech,

giddiness and unconsciousness.

Eye Contact May cause mild eye irritation. **Skin Contact** May cause mild skin irritation.

Ingestion May cause headache, dizziness, nausea, vomiting, gastrointestinal irritation and central

nervous system depression. May cause liver and kidney damage.

Chronic Effects/Carcinogenicity Repeated overexposure may cause liver and kidney effects.

Toxicology data for the components

Substances CAS Number		LD50 Oral	LD50 Dermal	LC50 Inhalation
Propylene glycol	57-55-6	20000 mg/kg (Rat)	20800 mg/kg (Rabbit)	> 317042 mg/m³ (Rabbit)
''		22000 mg/kg (rat)	> 2000 mg/kg (Rabbit)	, , ,

12. ECOLOGICAL INFORMATION

Ecotoxicological Information

Ecotoxicity Product

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

Ecotoxicity Substance

Ecotoxicity Cubstance								
Substances	CAS Number	Toxicity to Algae	Toxicity to Fish	Toxicity to	Toxicity to Invertebrates			
				Microorganisms				
Propylene glycol	57-55-6	EC50(48h): (growth rate)	LC50(96h): 40613 mg/L	NOEC(18h): >20000	LC50(96h): 18800 mg/L			
		34100 mg/L (Selenastrum	(Oncorhynchus mykiss)	mg/L (Pseudomonas	(Americamysis bahia)			
		capricornutum)	LC50(96h): 54900 mg/L	putida)	LC50(48h): 18340 mg/L			
		EC50(48h): (growth rate)	(Pimephales promelas)		(Ceriodaphnia dubia)			
		19000 mg/L	NOEC(7d): (growth rate)		NOEC(7d): (growth rate):			
		(Skeletonema costatum)	11530 mg/L (Pimephales		13020 mg/L			
		[`	promelas)		(Ceriodaphnia sp.)			

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 Disposal should be made in accordance with federal, state, and local regulations.

Contaminated Packaging Follow all applicable national or local regulations.

14. TRANSPORT INFORMATION

US DOT

UN Number: Not restricted.
UN Proper Shipping Name: Not restricted
Transport Hazard Class(es): Not applicable
Packing Group: Not applicable

US DOT Bulk

DOT (Bulk) Not Applicable

Canadian TDG ul0

UN Number: Not restricted.
UN Proper Shipping Name: Not restricted
Transport Hazard Class(es): Not applicable
Packing Group: Not applicable

IMDG/IMO

UN Number: Not restricted.
UN Proper Shipping Name: Not restricted
Transport Hazard Class(es): Not applicable
Packing Group: Not applicable

IATA/ICAO

UN Number: Not restricted.
UN Proper Shipping Name: Not restricted
Transport Hazard Class(es): Not applicable
Packing Group: Not applicable

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable

Special Precautions for User 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 All components listed do not apply to the California Proposition 65 Regulation.

MA Right-to-Know Law Does not apply.

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 Un-Controlled

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 StatementThis 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