HALLIBURTON

MATERIAL SAFETY DATA SHEET

Product Trade Name: MEG, M3

Revision Date: 04-Jan-2011

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Trade Name: MEG, M3
Synonyms: None
Chemical Family: Glycol
Application: Additive

Manufacturer/Supplier Halliburton Energy Services

P.O. Box 1431

Duncan, Oklahoma 73536-0431

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	ACGIH TLV-TWA	OSHA PEL-TWA
Ethylene glycol	107-21-1	60 - 100%	100 mg/m ³	50 ppm

3. HAZARDS IDENTIFICATION

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

nervous system effects. May be harmful if swallowed. Repeated overexposure may

cause liver and kidney effects.

4. FIRST AID MEASURES

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 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

FIRE FIGHTING MEASURES

Flash Point/Range (F): 232 Flash Point/Range (C): 111

Flash Point Method: Not Determined

Autoignition Temperature (F): 752 **Autoignition Temperature (C):** 400

Flammability Limits in Air - Lower (%): Not Determined Flammability Limits in Air - Upper (%): Not Determined

Fire Extinguishing Media Water fog, carbon dioxide, foam, dry chemical. **Special Exposure Hazards** Decomposition in fire may produce toxic gases.

Fire-Fighters

Special Protective Equipment for Full protective clothing and approved self-contained breathing apparatus required for

fire fighting personnel.

Health 2, Flammability 0, Reactivity 0 **NFPA Ratings: HMIS Ratings:** Health 2, Flammability 0, Reactivity 0

ACCIDENTAL RELEASE MEASURES

Personal Precautionary Measures Use appropriate protective equipment. Spills of this product are very slippery.

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.

HANDLING AND STORAGE

Avoid contact with eyes, skin, or clothing. Avoid breathing vapors. Wash hands after **Handling Precautions**

use. Launder contaminated clothing before reuse.

Storage Information Store away from oxidizers. Keep container closed when not in use.

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 with a dust/mist filter.

Hand Protection Impervious rubber gloves. Butyl rubber gloves. Viton gloves

Skin Protection Rubber apron.

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

Other Precautions Evewash fountains and safety showers must be easily accessible.

PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Liquid Color: Clear Odor: Mild

pH: Not Determined 9. PHYSICAL AND CHEMICAL PROPERTIES

Specific Gravity @ 20 C (Water=1): 1.115

Density @ 20 C (lbs./gallon): 9.29

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

Bulk Density @ 20 C (lbs/ft3):NotBoiling Point/Range (F):387Boiling Point/Range (C):197

Freezing Point/Range (F):

Freezing Point/Range (C):

Not Determined

Not Determined

Vapor Pressure @ 20 C (mmHg): 6.7 Vapor Density (Air=1): 2.14

Percent Volatiles: Not Determined Evaporation Rate (Butyl Acetate=1): Not Determined

Solubility in Water (g/100ml): Miscible

Solubility in Solvents (g/100ml):

VOCs (lbs./gallon):

Viscosity, Dynamic @ 20 C (centipoise):

Viscosity, Kinematic @ 20 C (centistrokes):

Partition Coefficient/n-Octanol/Water:

Not Determined

Not Determined

Molecular Weight (g/mole): 62.07

10. STABILITY AND REACTIVITY

Stability Data: Stable

Hazardous Polymerization: Will Not Occur

Conditions to Avoid None anticipated

Incompatibility (Materials to

Avoid)

Strong oxidizers.

Hazardous Decomposition

Products

Carbon monoxide and carbon dioxide.

Additional Guidelines Not Applicable

11. TOXICOLOGICAL INFORMATION

Principle Route of Exposure Eye or skin contact, inhalation.

Inhalation Vapors given off by heated product may be harmful. May cause respiratory irritation.

May cause central nervous system depression including headache, dizziness, drowsiness, incoordination, slowed reaction time, slurred speech, giddiness and

unconsciousness.

Skin Contact May cause skin irritation.

Eye Contact May cause eye irritation.

Ingestion Harmful if swallowed. May cause central nervous system depression including

headache, dizziness, drowsiness, muscular weakness, incoordination, slowed reaction time, fatigue blurred vision, slurred speech, giddiness, tremors and

convulsions. May cause liver and kidney damage.

Aggravated Medical Conditions Skin disorders. Central nervous system disorders.

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

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 / Not determined

Developmental Toxicity:

12. ECOLOGICAL INFORMATION

Mobility (Water/Soil/Air) Not determined

Persistence/Degradability Not determined

Bio-accumulation Not determined

Ecotoxicological Information

Acute Fish Toxicity: Not determined 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 Shipping 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

EPA SARA (313) Chemicals

This product contains toxic chemical(s) listed below which is(are) subject to the

reporting requirements of Section 313 of Title III of SARA and 40 CFR Part 372:

Ethylene Glycol//107-21-1

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 One or more components listed.

NJ Right-to-Know LawOne or more components listed.

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

Canadian Regulations

Canadian DSL Inventory All components listed on inventory.

WHMIS Hazard Class D2A Very 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

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