HALLIBURTON

MATERIAL SAFETY DATA SHEET

Product Trade Name: Foamer 760

Revision Date: 04-Jan-2011

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Trade Name: Foamer 760
Synonyms: None
Chemical Family: Surfactant
Application: Foaming Agent

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
Amphoteric surfactant		10 - 30%	Not applicable	Not applicable

3. HAZARDS IDENTIFICATION

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

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, 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. Give nothing by mouth. Obtain immediate medical

attention.

Notes to Physician Not Applicable

FIRE FIGHTING MEASURES

Flash Point/Range (F): > 201 Flash Point/Range (C): > 93.9 Flash Point Method: **PMCC**

Autoignition Temperature (F): Not Determined **Autoignition Temperature (C):** Not Determined 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 1, Flammability 1, Reactivity 0 **NFPA Ratings: HMIS Ratings:** Health 1, Flammability 1, Physical Hazard 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

Handling Precautions Avoid contact with eyes, skin, or clothing.

Storage Information Store away from oxidizers. Store in a dry location. Store in a well ventilated area.

EXPOSURE CONTROLS/PERSONAL PROTECTION

Use in a well ventilated area. Local exhaust ventilation should be used in areas **Engineering Controls**

without good cross ventilation.

If engineering controls and work practices cannot keep exposure below occupational **Respiratory Protection**

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.

Neoprene gloves. Impervious rubber gloves. Hand Protection

Skin Protection Rubber apron.

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

Other Precautions Rubber boots Eyewash fountains and safety showers must be easily accessible.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Liquid

Color: to Yellow Clear

Odor: Fatty 6.2 (10%) Specific Gravity @ 20 C (Water=1): 1.08 9.0 Density @ 20 C (lbs./gallon): Bulk Density @ 20 C (lbs/ft3): 68 **Boiling Point/Range (F):** 212 100 **Boiling Point/Range (C):** Freezing Point/Range (F): 15 Freezing Point/Range (C): -5

Vapor Pressure @ 20 C (mmHg): Not Determined

Vapor Density (Air=1): <1
Percent Volatiles: 55-59

Evaporation Rate (Butyl Acetate=1): Not Determined

Solubility in Water (g/100ml): Soluble

Solubility in Solvents (g/100ml):

VOCs (lbs./gallon):

Not Determined

Not Determined

Viscosity, Dynamic @ 20 C (centipoise): 16 (25C)

Viscosity, Kinematic @ 20 C (centistrokes):

Partition Coefficient/n-Octanol/Water:

Molecular Weight (g/mole):

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)

Strong oxidizers.

Hazardous Decomposition

Products

Hydrogen chloride. Hydrogen cyanide. Ammonia. Oxides of nitrogen. Carbon

monoxide and carbon dioxide.

Additional Guidelines Not Applicable

11. TOXICOLOGICAL INFORMATION

Principle Route of Exposure Eye or skin contact, inhalation.

Inhalation Inhalation of mist or heated vapors may cause respiratory irritation.

Skin Contact May cause skin irritation.

Eye Contact May cause moderate eye irritation.

Ingestion Large doses may cause nausea, vomiting and diarrhea.

Aggravated Medical Conditions None known.

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 / Not determined

Developmental Toxicity:

12. ECOLOGICAL INFORMATION

Mobility (Water/Soil/Air) Not determined

Persistence/Degradability Readily biodegradable BOD(28 Day): 71% of COD

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) ChemicalsThis 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 Does not apply.

PA Right-to-Know Law Does not apply.

Canadian Regulations

Canadian DSL Inventory Product contains one or more components not listed on inventory.

WHMIS Hazard Class Un-Controlled

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