### **HALLIBURTON**

# MATERIAL SAFETY DATA SHEET

Product Trade Name: BARACOR™ 95

Revision Date: 04-Jan-2011

# 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Trade Name: BARACOR™ 95

Synonyms: None
Chemical Family: Amine
Application: pH Control

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	ACGIH TLV-TWA	OSHA PEL-TWA
Monoethanolamine	141-43-5	60 - 100%	3 ppm	3 ppm

#### 3. HAZARDS IDENTIFICATION

Hazard Overview May cause eye and skin burns. May cause respiratory irritation. 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** 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

### FIRE FIGHTING MEASURES

Flash Point/Range (F): 205 Flash Point/Range (C): 96 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** Use water spray to cool fire exposed surfaces. Closed containers may explode in

fire. Decomposition in fire may produce toxic gases. Do not allow runoff to enter

waterways.

Fire-Fighters

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

fire fighting personnel.

**NFPA Ratings:** Health 3, Flammability 2, Reactivity 0 Health 3, Flammability 2, Reactivity 0 **HMIS Ratings:** 

# 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.

### HANDLING AND STORAGE

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

use. Launder contaminated clothing before reuse.

**Storage Information** Store away from acids. Store away from oxidizers. Store in a cool well ventilated

area. Keep container closed when not in use. Product has a shelf life of 36 months.

### **EXPOSURE CONTROLS/PERSONAL PROTECTION**

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

without good cross ventilation.

In high concentrations, supplied air respirator or a self-contained breathing **Respiratory Protection** 

apparatus.

**Hand Protection** Impervious rubber gloves.

**Skin Protection** Rubber apron. Rubber boots.

**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

Physical State:

Color:
Colorless
Odor:
PH:
Specific Gravity @ 20 C (Water=1):
Density @ 20 C (Ibs./gallon):

Liquid
Colorless
Amine
12
1.02
8.49

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

Boiling Point/Range (F): 266
Boiling Point/Range (C): 130
Freezing Point/Range (F): 9
Freezing Point/Range (C): -13
Vapor Pressure @ 20 C (mmHg): 0.2
Vapor Density (Air=1): 2.1

Percent Volatiles: Not Determined

Evaporation Rate (Butyl Acetate=1): 0.1
Solubility in Water (g/100ml): Miscible

Solubility in Solvents (g/100ml):

VOCs (lbs./gallon):

Not Determined

Not Determined

Viscosity, Dynamic @ 20 C (centipoise): 23

Viscosity, Kinematic @ 20 C (centistrokes):

Partition Coefficient/n-Octanol/Water:

Molecular Weight (g/mole):

Not Determined

-1.9 (OECD117)

Not Determined

### 10. STABILITY AND REACTIVITY

Stability Data: Stable

Hazardous Polymerization: Will Not Occur

Conditions to Avoid None known.

Incompatibility (Materials to

Avoid)

Strong acids. Strong oxidizers.

**Hazardous Decomposition** 

**Products** 

Ammonia. Carbon monoxide and carbon dioxide. Hydrocarbons.

Additional Guidelines Not Applicable

# 11. TOXICOLOGICAL INFORMATION

**Principle Route of Exposure** Eye or skin contact, inhalation.

**Inhalation** May cause respiratory irritation. May cause Central Nervous System effects.

**Skin Contact** Causes severe skin irritation. May cause skin burns.

**Eye Contact** Causes severe eye irritation May cause eye burns.

**Ingestion** May be harmful if swallowed. Causes burns of the mouth, throat and stomach. May

cause stomach discomfort. 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. Lung disorders. Liver and kidney disorders.

Chronic Effects/Carcinogenicity Prolonged or repeated exposure may cause central nervous system and brain

effects. Prolonged or repeated exposure may cause liver, kidney and lung effects.

Other Information None known.

**Toxicity Tests** 

Oral Toxicity: LD50: 1720 mg/kg (Rat)

Dermal Toxicity: LD50: 2000 mg/kg (Rabbit)

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 BOD(28 Day): 57% of COD

Bio-accumulation Not determined

# **Ecotoxicological Information**

Acute Fish Toxicity: EC50: 1247 mg/l (Corophium volutator)
Acute Crustaceans Toxicity: TLM48: 163.2 mg/l (Acartia tonsa)
Acute Algae Toxicity: EC50: 60.5 mg/l (Skeletonema costatum)

Chemical Fate InformationNot determinedOther InformationNot 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

UN2491, Ethanolamine Solution, 8, III NAERG 153

### **Canadian TDG**

Ethanolamine Solution, 8, UN2491, III

ADR

# Air Transportation

ICAO/IATA

UN2491, Ethanolamine Solution, 8, III

# Sea Transportation

**IMDG** 

UN2491, Ethanolamine Solution, 8, III EmS F-A, S-B

# Other Shipping Information

Labels: Corrosive

# 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

Fire Hazard

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

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.

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

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

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

Canadian Regulations

**Canadian DSL Inventory** All components listed on inventory.

**WHMIS Hazard Class Corrosive Material** Ε

B3 Combustible Liquids

# 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.

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