

MATERIAL SAFETY DATA SHEET

Product Trade Name: **BARACOR™ A**

Revision Date: 04-Jan-2011

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Trade Name: BARACOR™ A

Synonyms: None

Chemical Family: Blend

Application: Corrosion Inhibitor

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 |
|---|-------------------|----------------|----------------------|---------------------|
| Nitrilotriacetic acid, trisodium salt monohydrate | 5064-31-3 | 1 - 5% | Not applicable | Not applicable |
| Methanol | 67-56-1 | 10 - 30% | 200 ppm (S) | 200 ppm |

3. HAZARDS IDENTIFICATION

Hazard Overview

May be fatal if swallowed. May cause blindness. May be absorbed through the skin. Repeated overexposure may cause liver and kidney effects. May cause eye, skin, and respiratory irritation. May cause headache, dizziness, and other central nervous system effects. Flammable.

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

If swallowed, induce vomiting immediately by giving two glasses of water and sticking fingers down throat; never give anything to an unconscious person. Get medical attention.

Notes to Physician

Not Applicable

5. FIRE FIGHTING MEASURES

| | |
|--|----------------|
| Flash Point/Range (F): | 92 |
| Flash Point/Range (C): | 33 |
| Flash Point Method: | PMCC |
| Autoignition Temperature (F): | Not Determined |
| Autoignition Temperature (C): | Not Determined |
| Flammability Limits in Air - Lower (%): | 6 |
| Flammability Limits in Air - Upper (%): | 36 |

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. Runoff to sewer may cause fire or explosion hazard. May be ignited by heat, sparks or flames.

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 3, Reactivity 0

HMIS Ratings: Health 2, Flammability 3, Reactivity 0

6. ACCIDENTAL RELEASE MEASURES

Personal Precautionary Measures Use appropriate protective equipment. Wear self-contained breathing apparatus in enclosed areas.

Environmental Precautionary Measures Prevent from entering sewers, waterways, or low areas.

Procedure for Cleaning / Absorption Contain spill with sand or other inert materials. Isolate spill and stop leak where safe. Remove ignition sources and work with non-sparking tools. Scoop up and remove.

7. HANDLING AND STORAGE

Handling Precautions Wash hands after use. Launder contaminated clothing before reuse. Ground and bond containers when transferring from one container to another. Avoid contact with eyes, skin, or clothing. Avoid breathing vapors.

Storage Information Store away from oxidizers. Keep from heat, sparks, and open flames. 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. Local exhaust ventilation should be used in areas without good cross ventilation.

Respiratory Protection Positive pressure self-contained breathing apparatus if methanol is released.

Hand Protection Impervious rubber gloves.

Skin Protection

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: | Liquid |
| Color: | Brown |
| Odor: | Alcohol |
| pH: | 9-11 |
| Specific Gravity @ 20 C (Water=1): | 1.01 |
| Density @ 20 C (lbs./gallon): | 8.4 |
| Bulk Density @ 20 C (lbs/ft3): | Not Determined |
| Boiling Point/Range (F): | 212 |
| Boiling Point/Range (C): | 100 |
| Freezing Point/Range (F): | -9 |
| Freezing Point/Range (C): | -23 |
| Vapor Pressure @ 20 C (mmHg): | Not Determined |
| Vapor Density (Air=1): | > 1 |
| Percent Volatiles: | Not Determined |
| Evaporation Rate (Butyl Acetate=1): | 1.6 |
| Solubility in Water (g/100ml): | Soluble |
| Solubility in Solvents (g/100ml): | Not Determined |
| VOCs (lbs./gallon): | Not Determined |
| Viscosity, Dynamic @ 20 C (centipoise): | 35 |
| Viscosity, Kinematic @ 20 C (centistrokes): | Not Determined |
| Partition Coefficient/n-Octanol/Water: | -0.84 (OECD117) |
| Molecular Weight (g/mole): | Not Determined |

10. STABILITY AND REACTIVITY

| | |
|---|--|
| Stability Data: | Stable |
| Hazardous Polymerization: | Will Not Occur |
| Conditions to Avoid | Keep away from heat, sparks and flame. |
| Incompatibility (Materials to Avoid) | Strong oxidizers. |
| Hazardous Decomposition Products | 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 | 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. May be absorbed through the skin and produce effects similar to those caused by inhalation and/or ingestion. |
| Eye Contact | Causes severe eye irritation May cause eye burns. |
| Ingestion | May produce nervous system effects such as feeling of weakness, unsteady walk, and dilation of blood vessels. May be fatal or cause blindness if swallowed. |

| | |
|--|--|
| Aggravated Medical Conditions | Skin disorders. Eye ailments. |
| Chronic Effects/Carcinogenicity | Prolonged or repeated exposure may cause eye, blood, lung, liver, kidney, heart, central nervous system and spleen damage. |
| Other Information | None known. |

Toxicity Tests

| | |
|---|-----------------------------|
| Oral Toxicity: | LD50: 3500 mg/kg (Rat) |
| Dermal Toxicity: | LD50: > 3000 mg/kg (Rabbit) |
| 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 | BOD(28 Day): 10% of COD |
| Bio-accumulation | Not determined |

Ecotoxicological Information

| | |
|------------------------------------|-----------------------------------|
| Acute Fish Toxicity: | Not determined |
| Acute Crustaceans Toxicity: | TLM48: 402.5 mg/l (Daphnia magna) |
| 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

UN1993, Flammable Liquid, N.O.S.(Contains Methanol), 3, III, (33.3 C)
NAERG 128

Canadian TDG

Flammable Liquid, N.O.S.(Contains Methanol), 3, UN1993, III, (33.3 C)

ADR

UN1993,Flammable Liquid, N.O.S.(Contains Methanol), 3, III

Air Transportation

ICAO/IATA

UN1993,Flammable Liquid, N.O.S., 3, III
(Contains Methanol Solution)

Sea Transportation

IMDG

UN1993,Flammable Liquid, N.O.S.(Contains Methanol), 3, III, (33.3 C)
EmS F-E, S-E

Other Shipping Information

Labels: Flammable Liquid

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 Fire 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: Methanol//67-56-1 |
| EPA CERCLA/Superfund Reportable Spill Quantity | EPA Reportable Spill Quantity is 2380 Gallons based on Methanol (CAS: 67-56-1). |
| EPA RCRA Hazardous Waste Classification | If product becomes a waste, it does meet the criteria of a hazardous waste as defined by the US EPA, because of: Ignitability D001 |
| California Proposition 65 | The California Proposition 65 regulations apply to this product. |
| MA Right-to-Know Law | One or more components listed. |
| 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.

WHMIS Hazard Class
B2 Flammable Liquids
D1A Very Toxic Materials
D2A Very Toxic Materials
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.

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