

MATERIAL SAFETY DATA SHEET

Product Trade Name: **20N**

Revision Date: 04-Jan-2011

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Trade Name: 20N
Synonyms: None
Chemical Family: Blend
Application: Non-Emulsifier

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
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2. COMPOSITION/INFORMATION ON INGREDIENTS
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Substances	CAS Number	PERCENT	ACGIH TLV-TWA	OSHA PEL-TWA
Butyl alcohol	71-36-3	30 - 60%	20 ppm	100 ppm
Quaternary ammonium compounds		10 - 30%	Not applicable	Not applicable
Ethoxylated alcohols		5 - 10%	Not applicable	Not applicable
Alkyl hexanol		10 - 30%	Not applicable	Not applicable
Isopropanol	67-63-0	1 - 5%	200 ppm	400 ppm

3. HAZARDS IDENTIFICATION

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

5. FIRE FIGHTING MEASURES

Flash Point/Range (F):	103
Flash Point/Range (C):	39
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.

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

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. Remove ignition sources and work with non-sparking tools. 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. Launder contaminated clothing before reuse.

Storage Information Keep from heat, sparks, and open flames. Keep container closed when not in use. Product has a shelf life of 24 months. Store at temperatures between 50 and 100 F (10 and 37.8 C). Do not freeze.

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 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 Eyewash fountains and safety showers must be easily accessible.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Liquid
Color:	Clear light yellow
Odor:	Solvent
pH:	9.6
Specific Gravity @ 20 C (Water=1):	0.87
Density @ 20 C (lbs./gallon):	7.25
Bulk Density @ 20 C (lbs/ft3):	Not Determined
Boiling Point/Range (F):	Not Determined
Boiling Point/Range (C):	Not Determined
Freezing Point/Range (F):	Not Determined
Freezing Point/Range (C):	Not Determined
Vapor Pressure @ 20 C (mmHg):	Not Determined
Vapor Density (Air=1):	Not Determined
Percent Volatiles:	Not Determined
Evaporation Rate (Butyl Acetate=1):	Not Determined
Solubility in Water (g/100ml):	Disperses
Solubility in Solvents (g/100ml):	Not Determined
VOCs (lbs./gallon):	Not Determined
Viscosity, Dynamic @ 20 C (centipoise):	Not Determined
Viscosity, Kinematic @ 20 C (centistokes):	Not Determined
Partition Coefficient/n-Octanol/Water:	Not Determined
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. Strong acids.
Hazardous Decomposition Products	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 be absorbed through the skin and contribute to the symptoms listed under ingestion. May cause skin irritation.
Eye Contact	May cause eye burns. May cause corneal injury.
Ingestion	May cause abdominal pain, vomiting, nausea, and diarrhea. May cause liver and kidney damage. 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.
Aggravated Medical Conditions	Skin disorders. Eye ailments.

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 /
Developmental Toxicity:** Not determined

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

UN1993, Flammable Liquid, N.O.S. (Contains Isopropanol, Butanol), 3, III, (39.4 C)
NAERG 128

Canadian TDG

Flammable Liquid, N.O.S. (Contains Isopropanol, Butanol), 3, UN1993, III, (39.4 C)

ADR

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

Air Transportation

ICAO/IATA

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

Sea Transportation

IMDG

UN1993, Flammable Liquid, N.O.S. (Contains Isopropanol, Butanol), 3, III, (39.4 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:
n-Butanol//71-36-3
Glycol Ethers//68131-39-5
Isopropanol//67-63-0

EPA CERCLA/Superfund Reportable Spill Quantity EPA Reportable Spill Quantity is 1970 Gallons based on Butyl alcohol (CAS: 71-36-3).

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 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 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
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*****