1-1-100
Cement Additive

Material Safety Data Sheet

FLUID LOSS AGENT

March 31, 2000 MSDS #: 283670
PHONE NUMBERS
DOWNHOLE
SOLUTIONS INC
81694 HWY 21
Bush LA 70431
S
CHEMIC
AL
COMPAN
Y LP
EMERGENCY: 985 774 3836 OR 918 645 2735

EMERGENCY RESPONSE (ASIA): 800-AlertSGS
or 800-25378477 or 65-542-9595
TRANSPORTATION (24 HR): CHEMTREC
(800)424-9300 OR (703)527-3887

A

. Product Identification

Synonyms: Fluid Loss Additive
Chemical Name: Mixture
Chemical Family: Mixture
Chemical Formula: Mixture
CAS Reg. No.: Mixture
Product No.: Not Established
Product and/or Components Entered on EPA's TSCA Inventory: YES This product is in U.S. commerce, and is listed in the Toxic Substances Control Act (TSCA) Inventory of Chemicals; hence, it may be subject to applicable TSCA provisions and restrictions.
Canadian Inventory Listing Status: None This product contains ingredient(s) that is/are listed in NEITHER the Domestic Substances List (DSL) NOR the Non-Domestic Substances List (NDSL). Impurities are exempt in accordance with Section 3 of the Canadian Environmental Protection Act (CEPA).

B. Components

CAS % OSHA ACGIH Ingredients* Number By Wt. PEL TLV
This product does not meet the definition of a hazardous chemical given in 29 CFR Part 1910.1200 (OSHA). Information on this form is furnished as a customer service.
* See Section F, Recommended Exposure Limits.
C. Personal Protection Information

Ventilation: Use adequate ventilation to control below recommended exposure levels.
Respiratory Protection: For concentrations exceeding the recommended exposure level, use NIOSH approved air purifying respirator. In case of spill or leak resulting in unknown concentration, use NIOSH approved supplied air respirator.
Eye Protection: Use safety glasses with side shields.
Skin Protection: Use impervious gloves.
NOTE: Personal protection information shown in Section C is based upon general information as to normal uses and conditions. Where special or unusual uses or conditions exist, it is suggested that the expert assistance of an industrial hygienist or other qualified professional be sought.

D. Handling and Storage Precautions

Avoid breathing dust. Avoid contact with eyes, skin or clothing. Wear protective equipment and/or garments described in Section C if exposure conditions warrant. Wash thoroughly after handling. Launder contaminated clothing before reuse. Use with adequate ventilation.
Store in closed container. Store in well-ventilated area.

E. Reactivity Data

Stability: Stable Conditions to Avoid: Not Applicable
Incompatibility (Materials to Avoid): Not Applicable
Hazardous Polymerization: Will Not Occur
Conditions to Avoid: Not Applicable
Hazardous Decomposition Products: Not Established

F. Health Hazard Data

Recommended Exposure Limits:
Control as Particulate Not Otherwise Classified (PNOC) or Regulated: OSHA ACGIH PEL TLV*
Respirable Fraction 5 mg/m3 3 mg/m3
Total Dust 15 mg/m3 10 mg/m3

* The value is for inhalable (total) particulate matter containing no asbestos and

Acute Effects of Overexposure:
Eye: Dust may cause mechanical irritation. Skin: Dust may cause mechanical irritation. Inhalation: May cause mild irritation to the nose, throat, and upper respiratory tract. Ingestion: Large amounts may cause gastrointestinal upset, nausea and vomiting.

Subchronic and Chronic Effects of Overexposure:
No known applicable information.

Other Health Effects:
Long term exposure to high dust concentrations may cause non-debilitating lung injury.
Health Hazard Categories:
Animal Human Animal Human
Known Carcinogen Toxic
Suspect Carcinogen Corrosive
Allergic Sensitizer Irritant
Highly Toxic Target Organ Toxin

Specify - No known applicable information.

Canadian WHMIS
This product does not meet the criteria for any of the U.S. or Canadian health hazard categories.

First Aid and Emergency Procedures:
Eye: Flush eyes with running water. If irritation or adverse symptoms develop, seek medical attention.
Skin: Wash skin with soap and water. If irritation or adverse symptoms develop, seek medical attention.
Inhalation: Remove from exposure. If illness or adverse symptoms develop, seek medical attention.
Ingestion: If illness or adverse symptoms develop, seek medical attention.

G. Physical Data
Appearance: White powder
Odor: Odorless
Boiling Point: Applicable
Vapor Pressure: Applicable
Vapor Density (Air = 1): Applicable
Solubility in Water: Complete
Specific Gravity (H2O = 1): Not Established
Percent Volatile by Volume: 0
Evaporation Rate (Ethyl Ether = 1): Applicable
Viscosity: Applicable

H. Fire and Explosion Data
Flash Point (Method Used): Not Established
Flammable Limits (% by Volume in Air):
LEL - Not Established
UEL - Not Established
Fire Extinguishing Media: Dry chemical, foam or carbon dioxide (CO2)
Special Fire Fighting Procedures: Evacuate area of all unnecessary personnel. Shut off source, if possible. Use NIOSH approved self-contained breathing apparatus and other protective equipment and/or garments
described in Section C if conditions warrant. Water fog or spray may be used to cool exposed containers and equipment.

Fire and Explosion Hazards: If in a finely divided and suspended state in air, treat as a flammable dust. Carbon oxides may be released when burned. Becomes slippery when wet.

**I. Spill, Leak and Disposal Procedures**

Precautions Required if Material is Released or Spilled: Evacuate area of all unnecessary personnel. Wear protective equipment and/or garments described in Section C if exposure conditions warrant.

Shut off source, if possible and contain spill. Keep out of water sources and sewers. If concentration of finely divided dust in air is high, wet down, otherwise, avoid wetting spill. Material becomes very slippery. If spill is wet, absorb in a dry, inert material (sand, clay, etc). Sweep up and place in disposal containers.

Waste Disposal (Insure Conformity with all Applicable Disposal Regulations): Incinerate or place in permitted waste management facility.

**J. DOT Transportation**

Shipping Name: Not Regulated

Hazard Class: Not Regulated ID

Number: Not Regulated Marking:

Not Regulated Label: Not

Regulated Placard: Not Regulated

Hazardous Substance/RQ: Not

Regulated Shipping Description:

Not Regulated Packaging

References: Not Regulated

**K. RCRA Classification - Unadulterated Product as a Waste**

Prior to disposal, consult your environmental contact to determine if the TCLP (Toxicity Characteristic Leaching Procedure, EPA Test Method 1311) is required. Reference 40 CFR Part 261.

**L. Protection Required for Work on Contaminated Equipment**

Contact immediate supervisor for instructions before work is initiated. Wear protective equipment and/or garments described in Section C if exposure conditions warrant.

**M. Hazard Classification**

This product meets the following hazard definition(s) as defined by the Occupational Safety and Health Hazard Communication Standard (29 CFR Section 1910.1200):

- ___ Combustible Liquid
- ___ Flammable Aerosol
- ___ Oxidizer
- ___ Compressed Gas
- ___ Explosive
- ___ Pyrophoric
- ___ Flammable Gas
- ___ Health Hazard (Section F)
- ___ Unstable
- ___ Flammable Liquid
- ___ Organic Peroxide
- ___ Water Reactive
Based on information presently available, this product does not meet any of the hazard definitions of 29 CFR Section 1910.1200 or the Canadian Hazardous Products Act Controlled Products Regulations.

N. Additional Comments

SARA 313
As of the preparation date, this product did not contain a chemical or chemicals subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

NFPA 704 Hazard Codes

Least - 0
Health : 0 Slight - 1
Flammability: 0 Moderate - 2
Reactivity : 0 High - 3
Special Haz.: - Extreme - 4

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1-1-100
CEMENT ADDITIVE

Material Safety Data Sheet

POWDER RHEOLOGICAL DISPERSANT

March 31, 1999
MSDS #: 685680

Downhole Solutions Inc. Emergency: 985 774 3836 or 918 645 2735
81694 HWY 21
BUSH, LA 70431
(24 HR CHEMTREC
(800)424-9300 OR (703)527-3887

A. Product Identification
Synonyms: Cement additive
Chemical Name: Mixture
Chemical Family: Mixture
Chemical Formula: Mixture
CAS Reg. No.: Mixture
Product No.: Not Established
Product and/or Components Entered on EPA's TSCA Inventory: YES
This product is in U.S. commerce, and is listed in the Toxic Substances Control Act (TSCA) Inventory of Chemicals; hence, it may be subject to applicable TSCA provisions and restrictions.

B. Components
CAS % OSHA ACGIH Ingredients
Number By Wt. PEL TLV
The specific chemical identity of this material is being withheld as a trade secret. In accordance with the provisions of 29 CFR Part 1910.1200 (i), it will be provided to a health professional when requested. and/or to a physician or nurse in a medical emergency through utilization of the above Emergency Telephone Number. See Section F, for Recommended Exposure Limits.

C. Personal Protection Information
Ventilation: Use adequate ventilation to control concentration below recommended exposure limits.
Respiratory Protection: Use NIOSH approved single-use dust respirator.
Eye Protection: Use safety glasses with side shields.
Skin Protection: Use gloves resistant to the material being used. (Rubber or neoprene).
NOTE: Personal protection information shown in Section C is based upon
general information as to normal uses and conditions. Where special
or unusual uses or conditions exist, it is suggested that the expert
assistance of an industrial hygienist or other qualified professional
be sought.

D. Handling and Storage Precautions
Avoid contact with eyes, skin or clothing. Avoid breathing vapors,
mist, fume or dust. Wear protective equipment and/or garments
described in Section C if exposure conditions warrant. Wash thoroughly
after handling. Launder contaminated clothing before reuse. Use with
adequate ventilation.
Store in well-ventilated area. Store in closed container.

E. Reactivity Data
Stability: Stable
Conditions to Avoid: Not Applicable
Incompatibility (Materials to Avoid): Strong
oxidizing materials
Hazardous Polymerization: Will Not Occur Conditions to
Avoid: Not Applicable Hazardous Decomposition
Products: Carbon oxides and sulfur dioxide

F. Health Hazard Data
Recommended Exposure Limits:
Control as Particulate Not Otherwise Classified (PNOC) or Regulated: OSHA
ACGIH PEL TLV*
Respirable Fraction 5 mg/m3 3 mg/m3
Total Dust 15 mg/m3 10 mg/m3

* The value is for inhalable (total) particulate matter containing no
asbestos and

Acute Effects of Overexposure:
Eye: May cause mild irritation and redness.
Skin: Prolonged or repeated contact may cause
irritation. An allergic reaction may occur in
persons sensitized to one of the components of
the material. Inhalation: May be irritating to
the respiratory tract. Ingestion: No known
applicable information.

Subchronic and Chronic Effects of Overexposure:
Dust may aggravate symptoms of bronchitis or may provoke
asthmatic responses in persons with asthma who are sensitive to
dusts.

Other Health Effects:
No known applicable information.

Health Hazard Categories:
Animal Human Anima
Known Carcinogen Toxic
Suspect Corrosive Carcinogen
Mutagen Irritant
Teratogen  Target Organ Toxin
Allergic Sensitizer  Specify - No known applicable
Highly Toxic  information.

First Aid and Emergency Procedures:
Eye: Flush eyes with running water. If irritation or adverse symptoms develop, seek medical attention.
Skin: Wash skin with soap and water. If irritation or adverse symptoms develop, seek medical attention.
Inhalation: Remove from exposure. If illness or adverse symptoms develop, seek medical attention.
Ingestion: If illness or adverse symptoms develop, seek medical attention.

G. Physical Data
Appearance: Solid powder Odor: Musty
Boiling Point: 0F (-17.8C) Vapor Pressure: Not Applicable
Vapor Density (Air = 1): Not Applicable
Solubility in Water: Soluble in hot water
Specific Gravity (H2O = 1): 1.3 g/ml @ 77F (25C)
Percent Volatile by Weight: Not Established
Evaporation Rate (Butyl Acetate = 1): Not Applicable
Viscosity: Not Established

H. Fire and Explosion Data
Flash Point (Method Used): Not Applicable
LEL - Not Applicable
UEL - Not Applicable
Fire Extinguishing Media: Dry chemical, foam or carbon dioxide (CO2)
Special Fire Fighting Procedures: Evacuate area of all unnecessary personnel. Shut off source, if possible. Wear protective equipment and/or garments described in Section C if conditions warrant. Water fog or spray may be used to cool exposed equipment and containers. Use of water may create slick surfaces.
Fire and Explosion Hazards: Carbon oxides and Sulfur oxides formed when burned.

I. Spill, Leak and Disposal Procedures
Precautions Required if Material is Released or Spilled: Evacuate area of all unnecessary personnel. Wear protective equipment and/or garments described in Section C if exposure conditions warrant. Shut off source, if possible and contain spill. Protect from ignition. Keep out of water sources and sewers. Absorb in dry, inert material (sand, clay, etc.) and transfer to disposal container using non-sparking equipment.
Waste Disposal (Insure Conformity with all Applicable Disposal Regulations): Incinerate or place in permitted waste management facility.
J. DOT Transportation
Shipping Name: Not Regulated
Regulated Hazard Class: Not Regulated
ID Number: Not Regulated
Packing Group: Not Regulated
Marking: Not Regulated
Label: Not Regulated
Placard: Not Regulated
Hazardous Substance/RQ: Not Regulated
Shipping Description: Not Regulated
Packaging References: Not Regulated

K. RCRA Classification - Unadulterated Product as a Waste
Prior to disposal, consult your environmental contact to determine if TCLP (Toxicity Characteristic Leaching Procedure, EPA Test Method 1311) is required. Reference 40 CFR Part 261.

L. Protection Required for Work on Contaminated Equipment
Contact immediate supervisor for specific instructions before work is initiated. Wear protective equipment and/or garments described in Section C if exposure conditions warrant.

M. Hazard Classification
___ This product meets the following hazard definition(s) as defined by the Occupational Safety and Health Hazard Communication Standard (29 CFR Section 1910.1200):

___ Combustible Liquid ___ Flammable Aerosol ___ Oxidizer
___ Compressed Gas ___ Explosive ___ Pyrophoric
___ Flammable Gas ___ Health Hazard (Section F) ___ Unstable
___ Flammable Liquid ___ Organic Peroxide ___ Water Reactive
___ Flammable Solid

_X_ Based on information presently available, this product does not meet any of the hazard definitions of 29 CFR Section 1910.1200.

N. Additional Comments
SARA 313
As of the preparation date, this product did not contain a chemical or chemicals subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.
NFPA 704 Hazard Codes ------- Signals

Least - 0
Health : 1 Slight - 1
Flammability: 0 Moderate - 2
Reactivity : 0 High - 3
Special Haz.: - Extreme - 4

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