HALLIBURTON

MATERIAL SAFETY DATA SHEET

Product Trade Name: HR-800

Revision Date: 14-Jan-2013

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Trade Name: HR-800 Synonyms: None

Chemical Family: Carbohydrate **Application:** Retarder

Manufacturer/Supplier Halliburton Energy Services, Inc.

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

Substances	CAS Number	PERCENT (w/w)	ACGIH TLV-TWA	OSHA PEL-TWA
Gypsum	13397-24-5	60 - 100%	TWA: 10 mg/m ³	15 mg/m ³

3. HAZARDS IDENTIFICATION

Hazard Overview No significant hazards expected. Airborne dust may be explosive.

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.

Eyes In case of contact, immediately flush eyes with plenty of water for at least 15

minutes and get medical attention if irritation persists.

Ingestion Under normal conditions, first aid procedures are not required.

Notes to Physician Not Applicable

5. FIRE FIGHTING MEASURES

Flash Point/Range (F):

Flash Point/Range (C):

Flash Point Method:

Autoignition Temperature (F):

Flammability Limits in Air - Lower (%):

Not Determined

Fire Extinguishing Media Water fog, carbon dioxide, foam, dry chemical.

Special Exposure Hazards Organic dust in the presence of an ignition source can be explosive in high

concentrations. Good housekeeping practices are required to minimize this

potential.

Special Protective Equipment

for Fire-Fighters

Full protective clothing and approved self-contained breathing apparatus required

for fire fighting personnel.

NFPA Ratings: Health 0, Flammability 0, Reactivity 0

HMIS Ratings: Health 0, Flammability 0, Physical Hazard 0, PPE: B

6. ACCIDENTAL RELEASE MEASURES

Personal Precautionary

Measures

Use appropriate protective equipment. Avoid creating and breathing dust.

Environmental Precautionary

Measures

None known.

Procedure for Cleaning /

Absorption

Scoop up and remove.

7. HANDLING AND STORAGE

Handling Precautions Avoid creating or inhaling dust.

Storage Information Store away from oxidizers. Store in a cool, dry location.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls Use in a well ventilated area.

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

occupational exposure limits or if exposure is unknown, wear a NIOSH certified, European Standard EN 149, AS/NZS 1715:2009, 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:

Dust/mist respirator. (N95, P2/P3)

Hand Protection Normal work gloves.

Skin Protection Normal work coveralls.

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Other Precautions None known.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Powder

Color: White to Off white

 Odor:
 Odorless

 pH:
 6.75 (1%)

 Specific Gravity @ 20 C (Water=1):
 1.85

Density @ 20 C (lbs./gallon): Not Determined

Bulk Density @ 20 C (lbs/ft3):

Boiling Point/Range (F):

Boiling Point/Range (C):

Not Determined

Not Determined

Freezing Point/Range (F): 464
Freezing Point/Range (C): 240

Vapor Pressure @ 20 C (mmHg):

Vapor Density (Air=1):

Not Determined

Not Determined

Percent Volatiles: 0

Evaporation Rate (Butyl Acetate=1): Not Determined Solubility in Water (g/100ml): Not Determined 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 Moisture

Incompatibility (Materials to

Avoid)

Strong oxidizers.

Hazardous Decomposition

Products

Carbon monoxide and carbon dioxide.

Additional Guidelines Not Applicable

11. TOXICOLOGICAL INFORMATION

Principle Route of Exposure Eye or skin contact, inhalation.

Sympotoms related to exposure

Acute Toxicity

In high air concentrations: May cause irritation (upper respiratory) which includes soreness

of the nose and throat, coughing and sneezing.

Eye ContactMay cause mechanical irritation to eye. **Skin Contact**May cause mechanical skin irritation.

Ingestion None known

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Chronic Effects/Carcinogenicity

No data available to indicate product or components present at greater than 1% are chronic health hazards.

Toxicology data for the components

Substances	CAS Number	LD50 Oral	LD50 Dermal	LC50 Inhalation
Gypsum	13397-24-5	3000 mg/kg (Rat)	No data available	No data available

12. ECOLOGICAL INFORMATION

Ecotoxicological Information

Ecotoxicity Product

Acute Fish Toxicity: Not determined Acute Crustaceans Toxicity: Not determined Acute Algae Toxicity: Not determined

Ecotoxicity Substance

Substances	CAS Number	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Toxicity to Invertebrates
Gypsum	13397-24-5	No information available	No information available	No information available	No information available

12.2 Persistence and degradability

The methods for determining biodegradability are not applicable to inorganic substances.

12.3 Bioaccumulative potential

Does not bioaccumulate Product does not bioaccumulate due to reaction with water

12.4 Mobility in soil

No information available

12.5 Results of PBT and vPvB assessment

No information available.

12.6 Other adverse effects

13. DISPOSAL CONSIDERATIONS

Disposal MethodBury in a licensed landfill according to 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 Transportation 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

None

EPA SARA (313) Chemicals This 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

California Proposition 65

Not applicable.

EPA RCRA Hazardous Waste

Classification

If product becomes a waste, it does NOT meet the criteria of a hazardous waste

All components listed do not apply to the California Proposition 65 Regulation.

as defined by the US EPA.

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 All components listed on inventory or are exempt.

WHMIS Hazard Class Un-Controlled

16. OTHER INFORMATION

The following sections have been revised since the last issue of this SDS

Not applicable

Additional information

For additional information on the use of this product, contact your local Halliburton representative.

For questions about the 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