HALLIBURTON

MATERIAL SAFETY DATA SHEET

Product Trade Name: SP BREAKER

Revision Date: 20-Dec-2012

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Trade Name: SP BREAKER

Synonyms:NoneChemical Family:OxidantApplication:Breaker

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

e-mail: fdunexchem@halliburton.com

2. COMPOSITION/INFORMATION ON INGREDIENTS

Substances	CAS Number	PERCENT	ACGIH TLV-TWA	OSHA PEL-TWA
Sodium persulfate	7775-27-1	60 - 100%	0.1 mg/m ³	Not applicable

3. HAZARDS IDENTIFICATION

Hazard Overview May cause allergic skin and respiratory reaction. May cause eye irritation. Oxidizer.

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. Get medical attention if irritation persists.

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 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): Not Determined Flash Point/Range (C): Not Determined **Flash Point Method:** Not Determined **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 Oxidizer. May ignite combustibles. Decomposition in fire may produce toxic gases.

Fire-Fighters

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

fire fighting personnel.

Health 1, Flammability 0, Reactivity 1 **NFPA Ratings: HMIS Ratings:** Health 1, Flammability 0, Physical Hazard 1

ACCIDENTAL RELEASE MEASURES

Personal Precautionary Measures Use appropriate protective equipment. Avoid creating and breathing dust.

Environmental Precautionary

Measures

Prevent from entering sewers, waterways, or low areas.

Procedure for Cleaning /

Absorption

Scoop up and remove.

HANDLING AND STORAGE

Avoid contact with eyes, skin, or clothing. Avoid creating or inhaling dust. Avoid dust **Handling Precautions**

accumulations.

Storage Information Store away from combustibles. Store in a cool well ventilated area. Keep container

closed when not in use. Product has a shelf life of 12 months.

EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls Use in a well ventilated area. Localized ventilation should be used to control dust

levels.

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

Hand Protection Butyl rubber gloves.

Skin Protection Rubber apron.

Dust proof goggles. **Eye Protection**

Other Precautions Evewash fountains and safety showers must be easily accessible.

PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Powder

White Color: Odor: Odorless

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9. PHYSICAL AND CHEMICAL PROPERTIES

pH: 6 Specific Gravity @ 20 C (Water=1): 2.47

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

Bulk Density @ 20 C (lbs/ft3): 84.3

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): 35

Solubility in Solvents (g/100ml):

VOCs (lbs./gallon):

Viscosity, Dynamic @ 20 C (centipoise):

Viscosity, Kinematic @ 20 C (centistokes):

Partition Coefficient/n-Octanol/Water:

Not Determined
Not Determined
Not Determined

Molecular Weight (g/mole): 238.1

10. STABILITY AND REACTIVITY

Stability Data: Stable

Hazardous Polymerization: Will Not Occur

Conditions to Avoid Avoid contact with readily oxidizable materials.

Incompatibility (Materials to

Avoid)

Avoid halogens. Contact with acids. Strong alkalis. Combustible materials.

Hazardous Decomposition

Products

Oxides of sulfur. Oxygen. Sulfuric acid.

Additional Guidelines Not Applicable

11. TOXICOLOGICAL INFORMATION

Principle Route of Exposure Eye or skin contact, inhalation.

Inhalation May cause allergic respiratory reaction.

Skin Contact May cause an allergic skin reaction.

Eye Contact May cause eye irritation.

Ingestion Irritation of the mouth, throat, and stomach.

Aggravated Medical Conditions Lung disorders.

Chronic Effects/Carcinogenicity No data available to indicate product or components present at greater than 1% are

chronic health hazards.

Other Information None known.

Toxicity Tests

Oral Toxicity: LD50: 895 mg/kg (Rat)

Dermal Toxicity: LD50: > 10000 mg/kg (Rabbit)

SP BREAKER Page 3 of 6 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 Readily biodegradable

Bio-accumulation Not determined

Ecotoxicological Information

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

Chemical Fate InformationNot determinedOther InformationNot applicable

13. DISPOSAL CONSIDERATIONS

Disposal MethodDisposal should be made in accordance with federal, state, and local regulations.

Contaminated Packaging This bag may contain residue of a hazardous material. Some authorities may

regulate such containers as hazardous waste. Dispose of container according to

national or local regulations.

14. TRANSPORT INFORMATION

Land Transportation

DOT

UN1505, Sodium Persulfate, 5.1, III NAERG 140

Canadian TDG

Sodium Persulfate, 5.1, UN1505, III

ADR

UN1505, Sodium Persulfate, 5.1, III

Air Transportation

ICAO/IATA

Sea Transportation

IMDG

UN1505, Sodium Persulfate, 5.1, III EmS F-A, S-Q

Other Transportation Information

Labels: Oxidizer

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

Fire Hazard

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

Not applicable.

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 or are exempt.

WHMIS Hazard Class

C Oxidizing 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.

Disclaimer Statement

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END OF MSDS