HALLIBURTON

MATERIAL SAFETY DATA SHEET

Product Trade Name: BARASIL®-S

Revision Date: 19-Dec-2012

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE

COMPANY/UNDERTAKING

Statement of Hazardous Nature Hazardous according to the criteria of NOHSC, Non-Dangerous Goods according to

the criteria of ADG.

Manufacturer/Supplier Halliburton Australia Pty. Ltd.

15 Marriott Road

Jandakot WA 6164 Australia

ACN Number: 009 000 775

Telephone Number: 61 (08) 9455 8300 Fax Number: 61 (08) 9455 5300

Product Emergency Telephone

Australia: 08-64244950

Papua New Guinea: 05 1 281 575 5000

NewZealand: 06-7559274

Fire, Police & Ambulance - Emergency Telephone

Australia: 000

Papua New Guinea: 000 New Zealand: 111

Identification of Substances or Preparation

Product Trade Name: BARASIL®-S

Synonyms: None
Chemical Family: Silicate
UN Number: None
Dangerous Goods Class: None
Subsidiary Risk: None
Hazchem Code: None
Poisons Schedule: None

Application: Shale Inhibitor

Prepared By Chemical Compliance

Telephone: 1-580-251-4335

e-mail: fdunexchem@halliburton.com

2. COMPOSITION/INFORMATION ON INGREDIENTS

Substances	CAS Number	PERCENT	Australia NOHSC	New Zealand OEL	ACGIH TLV-TWA
Sodium silicate	1344-09-8	10 - 30%	Not applicable	Not applicable	Not applicable

Non-Hazardous Substance to Total of 100%

HAZARDS IDENTIFICATION

Hazard Overview May cause eye, skin, and respiratory burns. May be harmful if swallowed.

Risk Phrases R38 Irritating to skin.

R41 Risk of serious damage to eyes.

HSNO Classification 6.1D Acutely Toxic Substances

8.2C Substances that are corrosive to dermal tissue if exposed for greater than 1

hour.

8.3A Substances that are corrosive to ocular tissue. 9.3C Substances that are harmful to terrestrial vertebrates.

FIRST AID MEASURES

Inhalation If inhaled, remove from area to fresh air. Get medical attention if respiratory irritation

develops or if breathing becomes difficult.

In case of contact, immediately flush skin with plenty of soap and water for at least 15 Skin

minutes. Get medical attention. Remove contaminated clothing and launder before

reuse.

In case of contact, or suspected contact, immediately flush eyes with plenty of water Eyes

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.

Notes to Physician Not Applicable

FIRE FIGHTING MEASURES

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

Extinguishing media which must None known.

not be used for safety reasons

Special Exposure Hazards

Fire-Fighters

Decomposition in fire may produce toxic gases.

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

fire fighting personnel.

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. Neutralize to pH of 6-8. Scoop up and remove.

Do NOT spread spilled product with water.

HANDLING AND STORAGE

Handling Precautions Avoid contact with eyes, skin, or clothing. Avoid breathing vapors. Avoid breathing

mist. Wash hands after use. Launder contaminated clothing before reuse. Material

is slippery underfoot.

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

when not in use. Product has a shelf life of 36 months.

EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls Use in a well ventilated area. Local exhaust ventilation should be used in areas

without good cross ventilation.

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

Butyl rubber gloves. Impervious rubber gloves. Neoprene gloves. Nitrile gloves. **Hand Protection**

Skin Protection Full protective chemical resistant clothing.

Eye Protection Chemical goggles; also wear a face shield if splashing hazard exists.

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

PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Liquid Color: Clear to hazy Odor: Slightly soapy

pH: 13.2 Specific Gravity @ 20 C (Water=1): 1.5 Density @ 20 C (kg/l): 1.5

Bulk Density @ 20 C (kg/m³): Not Determined

Boiling Point/Range (C): 100 Freezing Point/Range (C): -2

Pour Point/Range (C): Not Determined Flash Point/Range (C): Not Determined **Flash Point Method:** Not Determined Not Determined **Autoignition Temperature (C):** Flammability Limits in Air - Lower (g/m³): Not Determined Flammability Limits in Air - Lower (%): Not Determined Flammability Limits in Air - Upper (g/m³): Not Determined Flammability Limits in Air - Upper (%): 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 Miscible

Solubility in Water (g/100ml):

Solubility in Solvents (g/100ml): Not Determined VOCs (g/l): Not Determined Viscosity, Dynamic @ 20 C (centipoise): 150 - 250 Viscosity, Kinematic @ 20 C (centistokes): Not Determined Partition Coefficient/n-Octanol/Water: Not Determined

Molecular Weight (g/mole): Not Determined Not Determined **Decomposition Temperature (C):**

STABILITY AND REACTIVITY

Stability Data: Stable

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Hazardous Polymerization: Will Not Occur

Conditions to Avoid None anticipated

Incompatibility (Materials to

Avoid)

Strong acids. Amphoteric metals such as aluminum, magnesium, lead, tin, or zinc.

Hazardous Decomposition

Products

Toxic fumes.

Additional Guidelines Not Applicable

11. TOXICOLOGICAL INFORMATION

Principle Route of Exposure Eye or skin contact, inhalation.

Inhalation Causes severe respiratory irritation.

Skin Contact Causes severe burns.

Eye Contact May cause eye burns.

Ingestion Causes burns of the mouth, throat and stomach.

Aggravated Medical Conditions Skin disorders. Respiratory 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: 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

BARASIL®-S Page 4 of 6 **Chemical Fate Information** Not determined **Other Information** Not applicable

DISPOSAL CONSIDERATIONS 13.

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

Contaminated Packaging Follow all applicable national or local regulations.

TRANSPORT INFORMATION

Land Transportation

ADR

Not restricted

Air Transportation

ICAO/IATA

Not restricted

Sea Transportation

IMDG

Not restricted

Other Transportation Information

Labels: None

15. REGULATORY INFORMATION

Chemical Inventories

Australian AICS Inventory

New Zealand Inventory of

Chemicals

US TSCA Inventory EINECS Inventory

All components listed on inventory or are exempt. All components listed on inventory or are exempt.

All components listed on inventory or are exempt.

This product, and all its components, complies with EINECS

Classification Χi Irritant.

Risk Phrases R38 Irritating to skin.

R41 Risk of serious damage to eyes.

Safety Phrases S26 In case of contact with eyes, rinse immediately with plenty of water and seek

medical advice.

S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

OTHER INFORMATION

The following sections have been revised since the last issue of this MSDS Not applicable

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Contact

Australian Poisons Information Centre

24 Hour Service: - 13 11 26

Police or Fire Brigade: - 000 (exchange): - 1100

New Zealand National Poisons Centre

0800 764 766

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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or completeness. The information is obtained from various sources including the manufacturer and other third party sources. The information may not be valid under all conditions nor if this material is used in combination with other materials or in any process. Final determination of suitability of any material is the sole responsibility of

the user.

END OF MSDS