SAFETY DATA SHEET

according to Regulation (EC) No. 453/2010

Sodium Bromide Completions Brine

Revision Date: 07-Dec-2012 Revision Number: 1

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product Identifier

Product Name Sodium Bromide Completions Brine

Relevant identified uses of the substance or mixture and uses advised against

Recommended Use Additive

Uses Advised Against No information available

Details of the supplier of the safety data sheet

Halliburton Manufacturing Services, Ltd. Halliburton House, Howemoss Crescent

Kirkhill Industrial Estate

Dyce

Aberdeen, AB21 0GN

United Kingdom

Emergency Phone Number: +44 1224 795277 or +1 281 575 5000

www.halliburton.com

For further information, please contact

E-Mail address: fdunexchem@halliburton.com

Emergency telephone number

+44 1224 795277 or +1 281 575 5000

+44 1224 /952// 01+	1 281 575 5000
Emergency telephone §45	- (EC)1272/2008
Europe	112
Denmark	Poison Control Hotline (DK): +45 82 12 12 12
France	ORFILA (FR): + 01 45 42 59 59
Germany	Poison Center Berlin (DE): +49 030 30686 790
Italy	Poison Center, Milan (IT): +39 02 6610 1029
Netherlands	National Poisons Information Center (NL): +31 30 274 88 88 (NB: this service is only available to health professionals)
Norway	Poisons Information (NO):+ 47 22 591300
Poland	Poison Control and Information Centre, Warsaw (PL): +48 22 619 66 54; +48 22 619 08 97
Spain	Poison Information Service (ES): +34 91 562 04 20
United Kingdom	NHS Direct (UK): +44 0845 46 47

2. HAZARDS IDENTIFICATION

Classification of the substance or mixture REGULATION (EC) No 1272/2008

Serious Eye Damage / Eye Irritation Category 2- (H319)

Classification according to EU Directives 67/548/EEC or 1999/45/EC

For the full text of the R-phrases mentioned in this Section, see Section 16

2. HAZARDS IDENTIFICATION

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Classification

Xi - Irritant.

Risk Phrases R36 Irritating to eyes.

Label Elements

Hazard Pictograms



Signal Word Warning

Hazard Statements

H319 - Causes serious eye irritation

Contains

Substances CAS Number Sodium bromide 7647-15-6

Precautionary Statements - EU (§28, 1272/2008)

P264 - Wash face, hands and any exposed skin thoroughly after handling

P280 - Wear eye protection/face protection

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P337 + P313 - If eye irritation persists: Get medical advice/attention

Other Hazards

None known

	3. COMPOSITION/INFORMATION ON INGREDIEI	NTS
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Substances	EINECS	CAS Number	PERCENT	EEC Classification	EU - CLP Substance Classification	REACH No.
Sodium bromide	231-599-9	7647-15-6	30 - 60%	Xi; R36	Eye Irrit. 2 (H319)	No data available

For the full text of the R-phrases mentioned in this Section, see Section 16

4. FIRST AID MEASURES

Description of first aid measures

Inhalation

Eyes

Skin

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. 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. 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.

4. FIRST AID MEASURES

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.

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Most Important symptoms and effects, both acute and delayed

May cause eye irritation.

Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically

5. FIREFIGHTING MEASURES

Extinguishing mediaó

Suitable Extinguishing Media

All standard fire fighting media

Extinguishing media which must not be used for safety reasons

None known.

Special hazards arising from the substance of mixture

Special Exposure Hazards

Decomposition in fire may produce toxic gases.

Advice for firefighters

Special Protective Equipment for Fire-Fighters

Full protective clothing and approved self-contained breathing apparatus required for fire fighting personnel.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Use appropriate protective equipment.

See Section 12 for additional information

Environmental precautions

Prevent from entering sewers, waterways, or low areas.

Methods and material for containment and cleaning up

Isolate spill and stop leak where safe. Contain spill with sand or other inert materials. Scoop up and remove.

Reference to other sections

See Section 12 for additional information.

7. HANDLING AND STORAGE

Precautions for Safe Handling

Avoid contact with eyes, skin, or clothing. Wash hands after use. Launder contaminated clothing before reuse.

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice

Conditions for safe storage, including any incompatibilities

Store away from acids. Store in a cool, dry location. Keep container closed when not in use. Store away from oxidizers.

Specific End Use(s)

Exposure Scenario No information available Other Guidelines No information available

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Control parameters					
Substances	EU	UK OEL	Netherlands	France OEL	Germany MAK/TRK
Sodium bromide	Not applicable	10 mg/m ³	Not applicable	Not applicable	Not applicable

Substances	Italy	Poland	Hungary	Czech Republic	Denmark
Sodium bromide	Not applicable				

Derived No Effect Level (DNEL)
Predicted No Effect Concentration

(PNEC)

No information available. No information available.

Exposure controls

Engineering Controls

Use in a well ventilated area.

Personal protective equipment

Respiratory Protection

Dust/mist respirator. (N95, P2/P3) Not normally needed. But if significant exposures are

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possible then the following respirator is recommended:

Hand Protection Nitrile gloves.

Skin Protection Normal work coveralls.

Eye Protection Chemical goggles; also wear a face shield if splashing hazard exists. **Other Precautions** Eyewash fountains and safety showers must be easily accessible.

Environmental Exposure Controls No information available

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical State: Liquid Color: Clear colorless

Odor: Odorless Odor Threshold: No information available

Property Values

Remarks/ Method

No data available pH: Melting Point/Range No data available Freezing Point/Range (C): No data available **Boiling Point/Range** No data available No data available **Flash Point** No data available **Evaporation rate Vapor Pressure** No data available **Vapor Density** No data available **Specific Gravity** No data available **Water Solubility** Soluble in water Solubility in other solvents No data available Partition coefficient: n-octanol/water No data available **Autoignition Temperature** No data available **Decomposition Temperature** No data available No data available Viscosity **Explosive Properties** No information available

Other information

Oxidizing Properties

VOC Content (%) No data available

10. STABILITY AND REACTIVITY

No information available

Reactivity

Not applicable

Chemical Stability

Stable

Possibility of Hazardous Reactions

Will Not Occur

Conditions to Avoid

None anticipated

Incompatible Materials

Strong oxidizers.

Hazardous Decomposition Products

Carbon monoxide and carbon dioxide.

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Information on Toxicological Effects

Acute Toxicity

Inhalation Vapors given off by heated product may be harmful. May cause respiratory irritation. May

11. TOXICOLOGICAL INFORMATION

cause central nervous system depression including headache, dizziness, drowsiness, incoordination, slowed reaction time, slurred speech, giddiness and unconsciousness.

Eye Contact May cause eye irritation.
Skin Contact May cause skin irritation.
Ingestion Harmful if swallowed. Ma

Harmful if swallowed. 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. May cause liver and

kidney damage.

Chronic Effects/Carcinogenicity Repeated overexposure may cause liver and kidney effects.

Substances	LD50 Oral	LD50 Dermal	LC50 Inhalation
Sodium bromide	3500 mg/kg	No data available	No data available

12. ECOLOGICAL INFORMATION

Toxicity

Ecotoxicity Effects

Substances	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Sodium bromide	EC50: 5800 - 24000 mg/L	LC50: > 1000 mg/L (Lepomis	No information available	EC50: 5800 - 48000 mg/L
	(Scenedesmus pannonicus)	macrochirus)		(Daphnia magna)

Persistence and degradability

No information available

Bioaccumulative potential

No information available

Mobility in soil

No information available

Results of PBT and vPvB assessment

No information available.

Other adverse effects

Endocrine Disruptor Information

This product does not contain any known or suspected endocrine disruptors

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

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

Contaminated Packaging Follow all applicable national or local regulations.

14. TRANSPORT INFORMATION

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14. TRANSPORT INFORMATION

IMDG/IMO

Not restricted. **UN Number: UN Proper Shipping Name:** Not restricted Transport Hazard Class(es): Not applicable

RID

UN Number: Not restricted. **UN Proper Shipping Name:** Not restricted Transport Hazard Class(es): Not applicable

ADR

UN Number: Not restricted. **UN Proper Shipping Name:** Not restricted Transport Hazard Class(es): Not applicable

IATA/ICAO

UN Number: Not restricted. Not restricted **UN Proper Shipping Name:** Transport Hazard Class(es): Not applicable

Special Precautions for User None

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable

15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture

International Inventories

EINECS Inventory This product does not comply with EINECS All components listed on inventory or are exempt. **US TSCA Inventory**

Canadian DSL Inventory Product contains one or more components not listed on the inventory.

Legend

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

Germany, Water Endangering

Classes (WGK)

WGK 1: Low hazard to waters.

Chemical Safety Assessment

No information available

16. OTHER INFORMATION

Full text of R-phrases referred to under Sections 2 and 3

R36 Irritating to eyes.

Key literature references and sources for data

www.ChemADVISOR.com/

Revision Date: 07-Dec-2012 **Revision Note** Not applicable

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

16. OTHER INFORMATION

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Disclaimer Statement

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End of Safety Data Sheet
