

## SAFETY DATA SHEET

**Product Trade Name:** BARAPLUG® 20

**Revision Date:** 05-Mar-2015

**Revision Number:** 11

### 1. Identification

#### 1.1. Product Identifier

**Product Trade Name:** BARAPLUG® 20  
**Synonyms:** None  
**Chemical Family:** Salt  
**Internal ID Code** HM003519

#### 1.2 Recommended use and restrictions on use

**Application:** Bridging Agent  
**Uses Advised Against** No information available

#### 1.3 Manufacturer's Name and Contact Details

##### Manufacturer/Supplier

Baroid Fluid Services  
Product Service Line of Halliburton  
P.O. Box 1675  
Houston, TX 77251  
Telephone: (281) 871-4000  
Emergency Telephone: 1-866-519-4752 (US, Canada, Mexico) or 1-760-476-3962

Halliburton Energy Services  
645 - 7th Ave SW Suite 2200  
Calgary, AB  
T2P 4G8  
Canada

**Prepared By** Chemical Stewardship  
Telephone: 1-281-871-6107  
e-mail: fdunexchem@halliburton.com

#### 1.4. Emergency telephone number

**Emergency Telephone Number** 1-866-519-4752 or 1-760-476-3962

### 2. Hazard(s) Identification

#### 2.1 Classification in accordance with paragraph (d) of §1910.1200

Serious Eye Damage / Eye Irritation

Category 2B - (H320)

#### 2.2. Label Elements

##### Hazard Pictograms

**Signal Word** Warning

**Hazard Statements** H320 - Causes mild eye irritation

**Precautionary Statements**

<b>Prevention</b>	P261 - Avoid breathing dust/fume/gas/mist/vapors/spray P264 - Wash face, hands and any exposed skin thoroughly after handling
<b>Response</b>	P337 + P313 - If eye irritation persists: Get medical advice/attention
<b>Storage</b>	P402 + P404 - Store in a dry place. Store in a closed container
<b>Disposal</b>	P501 - Dispose of contents/container to an approved landfill

**Contains  
Substances**  
Sodium chloride

**CAS Number**  
7647-14-5

**2.3 Hazards not otherwise classified**

None known

**3. Composition/information on Ingredients**

<b>Substances</b>	<b>CAS Number</b>	<b>PERCENT (w/w)</b>	<b>GHS Classification - US</b>
Sodium chloride	7647-14-5	60 - 100%	Eye Irrit. 2B (H320)

The exact percentage (concentration) of the composition has been withheld as proprietary.

**4. First-Aid Measures****4.1. Description of first aid measures**

<b>Inhalation</b>	If inhaled, remove from area to fresh air. Get medical attention if respiratory irritation develops or if breathing becomes difficult.
<b>Eyes</b>	In case of contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention if irritation persists.
<b>Skin</b>	Wash with soap and water. Get medical attention if irritation persists.
<b>Ingestion</b>	Under normal conditions, first aid procedures are not required.

**4.2 Most important symptoms/effects, acute and delayed**

May cause mild eye irritation.

**4.3. Indication of any immediate medical attention and special treatment needed**

**Notes to Physician** Treat symptomatically.

**5. Fire-fighting measures****5.1. Extinguishing media****Suitable Extinguishing Media**

All standard fire fighting media

**Extinguishing media which must not be used for safety reasons**

None known.

**5.2 Specific hazards arising from the substance or mixture****Special Exposure Hazards**

None anticipated

**5.3 Special protective equipment and precautions for fire-fighters**

Special Protective Equipment for Fire-Fighters

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

## 6. Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

Use appropriate protective equipment. Avoid creating and breathing dust.  
See Section 8 for additional information

### 6.2. Environmental precautions

None known.

### 6.3. Methods and material for containment and cleaning up

Scoop up and remove.

## 7. Handling and storage

### 7.1. Precautions for Safe Handling

#### Handling Precautions

Avoid creating or inhaling dust.

#### Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice.

### 7.2. Conditions for safe storage, including any incompatibilities

#### Storage Information

Store in a cool, dry location. Product has a shelf life of 60 months.

## 8. Exposure Controls/Personal Protection

### 8.1 Occupational Exposure Limits

Substances	CAS Number	OSHA PEL-TWA	ACGIH TLV-TWA
Sodium chloride	7647-14-5	Not applicable	Not applicable

### 8.2 Appropriate engineering controls

**Engineering Controls** Use in a well ventilated area.

### 8.3 Individual protection measures, such as personal protective equipment

**Personal Protective Equipment** If engineering controls and work practices cannot prevent excessive exposures, the selection and proper use of personal protective equipment should be determined by an industrial hygienist or other qualified professional based on the specific application of this product.

**Respiratory Protection** 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.

**Eye Protection**

Wear safety glasses or goggles to protect against exposure.

**Other Precautions**

None known.

## 9. Physical and Chemical Properties

### 9.1. Information on basic physical and chemical properties

**Physical State:** Solid

**Color:**

White

**Odor:** Odorless

**Odor**

No information available

**Threshold:**

<u>Property</u>	<u>Values</u>
<u>Remarks/ - Method</u>	
<b>pH:</b>	5.2
<b>Freezing Point/Range</b>	No data available
<b>Melting Point/Range</b>	No data available
<b>Boiling Point/Range</b>	1413 °C / 2575 °F
<b>Flash Point</b>	No data available
<b>Flammability (solid, gas)</b>	No data available
upper flammability limit	No data available
lower flammability limit	No data available
<b>Evaporation rate</b>	No data available
<b>Vapor Pressure</b>	2.4 mmHg
<b>Vapor Density</b>	No data available
<b>Specific Gravity</b>	2.2
<b>Water Solubility</b>	Soluble in water (35.7g/100mL)
<b>Solubility in other solvents</b>	No data available
<b>Partition coefficient: n-octanol/water</b>	No data available
<b>Autoignition Temperature</b>	No data available
<b>Decomposition Temperature</b>	No data available
<b>Viscosity</b>	No data available
<b>Explosive Properties</b>	No information available
<b>Oxidizing Properties</b>	No information available
<b><u>9.2. Other information</u></b>	
<b>Molecular Weight</b>	58.44
<b>VOC Content (%)</b>	No data available

## 10. Stability and Reactivity

### 10.1. Reactivity

Not expected to be reactive.

### 10.2. Chemical Stability

Stable

### 10.3. Possibility of Hazardous Reactions

Will Not Occur

### 10.4. Conditions to Avoid

None anticipated

### 10.5. Incompatible Materials

None known.

### 10.6. Hazardous Decomposition Products

None known.

## 11. Toxicological Information

### 11.1 Information on likely routes of exposure

**Principle Route of Exposure**      Eye or skin contact, inhalation.

### 11.2 Symptoms related to the physical, chemical and toxicological characteristics

#### **Acute Toxicity**

**Inhalation**                      May cause respiratory irritation.

**Eye Contact**                    May cause eye irritation.

**Skin Contact  
Ingestion**

May cause skin irritation.  
None known.

**Chronic Effects/Carcinogenicity** No data available to indicate product or components present at greater than 0.1% are chronic health hazards.

**11.3 Toxicity data****Toxicology data for the components**

Substances	CAS Number	LD50 Oral	LD50 Dermal	LC50 Inhalation
Sodium chloride	7647-14-5	3000 mg/kg (Rat) 3550 mg/kg (Rat)	>10000 mg/kg (Rabbit)	42 mg/L (Rat) 1h

Substances	CAS Number	Skin corrosion/irritation
Sodium chloride	7647-14-5	Non-irritating to the skin (Rabbit)

Substances	CAS Number	Eye damage/irritation
Sodium chloride	7647-14-5	May cause mild eye irritation. (Rabbit)

Substances	CAS Number	Skin Sensitization
Sodium chloride	7647-14-5	No information available

Substances	CAS Number	Respiratory Sensitization
Sodium chloride	7647-14-5	No information available

Substances	CAS Number	Mutagenic Effects
Sodium chloride	7647-14-5	No information available

Substances	CAS Number	Carcinogenic Effects
Sodium chloride	7647-14-5	Did not show carcinogenic effects in animal experiments

Substances	CAS Number	Reproductive toxicity
Sodium chloride	7647-14-5	Animal testing did not show any effects on fertility. Did not show teratogenic effects in animal experiments.

Substances	CAS Number	STOT - single exposure
Sodium chloride	7647-14-5	No information available

Substances	CAS Number	STOT - repeated exposure
Sodium chloride	7647-14-5	No significant toxicity observed in animal studies at concentration requiring classification.

Substances	CAS Number	Aspiration hazard
Sodium chloride	7647-14-5	Not applicable

**12. Ecological Information****12.1. Toxicity****Ecotoxicity Effects****Product Ecotoxicity Data**

No data available

**Substance Ecotoxicity Data**

Substances	CAS Number	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Toxicity to Invertebrates
Sodium chloride	7647-14-5	EC50 (120h) 2430 mg/L (Nitzschia sp.)	TLM96 > 1000 mg/L (Oncorhynchus mykiss) LC50 (96h) 5840 mg/L (Lepomis macrochirus) NOEC (33d) 252 mg/L (Pimephales promelas)	NOEC 5000 – 8000 mg/L (activated sludge) NOEC 292-584 mg/L (Escherichia coli)	TLM96 > 1,000,000 ppm (Mysidopsis bahia) LC50 (48h) 874-4136 mg/L (Daphnia magna) NOEC (21d) 314 mg/L (Daphnia pulex)

**12.2. Persistence and degradability**

Substances	CAS Number	Persistence and Degradability
Sodium chloride	7647-14-5	No information available

**12.3. Bioaccumulative potential**

Substances	CAS Number	Log Pow
Sodium chloride	7647-14-5	No information available

**12.4. Mobility in soil**

Substances	CAS Number	Mobility
Sodium chloride	7647-14-5	No information available

**12.5 Other adverse effects**

No information available

**13. Disposal Considerations****13.1. Waste treatment methods**

**Disposal Method** Bury in a licensed landfill according to federal, state, and local regulations.  
**Contaminated Packaging** Follow all applicable national or local regulations.

**14. Transport Information****US DOT**

**UN Number:** Not restricted  
**UN Proper Shipping Name:** Not restricted  
**Transport Hazard Class(es):** Not applicable  
**Packing Group:** Not applicable  
**Environmental Hazards:** Not applicable

**US DOT Bulk**

**DOT (Bulk)** Not applicable

**Canadian TDG**

**UN Number:** Not restricted  
**UN Proper Shipping Name:** Not restricted  
**Transport Hazard Class(es):** Not applicable  
**Packing Group:** Not applicable  
**Environmental Hazards:** Not applicable

**IMDG/IMO**

**UN Number:** Not restricted  
**UN Proper Shipping Name:** Not restricted  
**Transport Hazard Class(es):** Not applicable  
**Packing Group:** Not applicable  
**Environmental Hazards:** Not applicable

**IATA/ICAO**

**UN Number:** Not restricted  
**UN Proper Shipping Name:** Not restricted  
**Transport Hazard Class(es):** Not applicable  
**Packing Group:** Not applicable  
**Environmental Hazards:** Not applicable

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

**Special Precautions for User:** None

## 15. Regulatory Information

### US Regulations

**US TSCA Inventory** All components listed on inventory or are exempt.

#### TSCA Significant New Use Rules - S5A2

Substances	CAS Number	TSCA Significant New Use Rules - S5A2
Sodium chloride	7647-14-5	Not applicable

#### EPA SARA Title III Extremely Hazardous Substances

Substances	CAS Number	EPA SARA Title III Extremely Hazardous Substances
Sodium chloride	7647-14-5	Not applicable

#### EPA SARA (311,312) Hazard Class

Acute Health Hazard

#### EPA SARA (313) Chemicals

Substances	CAS Number	Toxic Release Inventory (TRI) - Group I	Toxic Release Inventory (TRI) - Group II
Sodium chloride	7647-14-5	Not applicable	Not applicable

#### EPA CERCLA/Superfund Reportable Spill Quantity

Substances	CAS Number	CERCLA RQ
Sodium chloride	7647-14-5	Not applicable

#### EPA RCRA Hazardous Waste Classification

If product becomes a waste, it does NOT meet the criteria of a hazardous waste as defined by the US EPA.

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

**MA Right-to-Know Law** Does not apply.

**NJ Right-to-Know Law** Does not apply.

**PA Right-to-Know Law** Does not apply.

**NFPA Ratings:** Health 0, Flammability 0, Reactivity 0

**HMIS Ratings:** Health 0, Flammability 0, Reactivity 0

### Canadian Regulations

**Canadian DSL Inventory** All components listed on inventory or are exempt.

## 16. Other information

#### Preparation Information

**Prepared By** Chemical Stewardship  
Telephone: 1-281-871-6107  
e-mail: fdunexchem@halliburton.com

**Revision Date:** 05-Mar-2015

**Reason for Revision**

Update to Format  
SECTION:  
2

**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 Stewardship at 1-580-251-4335.

**Key or legend to abbreviations and acronyms**

bw – body weight  
CAS – Chemical Abstracts Service  
EC50 – Effective Concentration 50%  
ErC50 – Effective Concentration growth rate 50%  
LC50 – Lethal Concentration 50%  
LD50 – Lethal Dose 50%  
LL50 – Lethal Loading 50%  
mg/kg – milligram/kilogram  
mg/L – milligram/liter  
NIOSH – National Institute for Occupational Safety and Health  
NTP – National Toxicology Program  
OEL – Occupational Exposure Limit  
PEL – Permissible Exposure Limit  
ppm – parts per million  
STEL – Short Term Exposure Limit  
TWA – Time-Weighted Average  
UN – United Nations  
h - hour  
mg/m<sup>3</sup> - milligram/cubic meter  
mm - millimeter  
mmHg - millimeter mercury  
w/w - weight/weight  
d - day

**Key literature references and sources for data**

[www.ChemADVISOR.com/](http://www.ChemADVISOR.com/)  
OSHA  
ECHA C&L

**Disclaimer Statement**

This information is furnished without warranty, expressed or implied, as to accuracy 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 Safety Data Sheet**