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

Product identifier
Product Name: Saturated Sodium Chloride Treated Brine

Other means of identification
Product Code(s): USM LCM BRINE
UNID No: N/A

Recommended use of the chemical and restrictions on use
Recommended Use: Industrial & Oilfield applications
None known

Details of the supplier of the safety data sheet
Manufacturer Address: Underground Services Markham, LLC
Route 1 Box 144D
Bay City, Texas 77414

Emergency telephone number
Company Phone Number: 979-843-5214; 800-392-4719
Emergency Contact: CHEMTREC: +1-703-527-3887 (INTERNATIONAL)
1-800-424-9300 (NORTH AMERICA)

2. HAZARDS IDENTIFICATION

Classification
Serious eye damage/eye irritation: Category 2B

GHS Label elements, including precautionary statements

Warning
Hazard Statements
Causes eye irritation

Appearance
Clear to hazy

Physical state
Liquid

Odor
Salty

Precautionary Statements - Prevention
Wash face, hands and any exposed skin thoroughly after handling

Eyes
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
If eye irritation persists: Get medical advice/attention
3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS-No</th>
<th>Weight %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>74-78</td>
</tr>
<tr>
<td>Sodium Chloride</td>
<td>7647-14-5</td>
<td>22-26</td>
</tr>
</tbody>
</table>

This product may contain trace concentrations of petroleum hydrocarbon constituents, including benzene.

4. FIRST AID MEASURES

First aid measures for different exposure routes

Eye contact   Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing. Get medical attention if irritation persists.

Skin contact  Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If skin irritation persists, call a physician.

Inhalation    Move to fresh air.

Ingestion     Never give anything by mouth to an unconscious person. Drink plenty of water. Induce vomiting, but only if victim is fully conscious. If large quantity is consumed, seek medical attention.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician Keep patient under observation. Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media None.

Specific hazards arising from the chemical Negligible fire hazard.

Hazardous Combustion Products None.

Explosion data
Sensitivity to Mechanical Impact None.
Sensitivity to Static Discharge None.

Protective Equipment and Precautions for Firefighters
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES
Personal Precautions, Protective Equipment and Emergency Procedures

Environmental Precautions

Environmental Precautions
Keep out of waterways. Brine Solution (salt water) may be fatal to freshwater species.

Methods and Materials for Containment and Cleaning Up

Methods for Containment
Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see Section 13).

Methods for Cleaning Up
Use mechanical means such as pumps and absorbent materials. Pick up and transfer to properly labeled containers.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling
Wear personal protective equipment. Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Technical measures/Storage conditions
Brine Solution causes corrosion of metal components. Dike and vent storage tank.

Incompatible products
Strong mineral acids. Sulfuric acid. Nitric Acid.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure controls

Engineering Measures
Ensure that eyewash stations and safety showers are close to the workstation location.

Individual protection measures, such as personal protective equipment

Eye/face Protection
Safety glasses with side-shields or Tightly fitting safety goggles.

Skin and body protection
Chemical resistant. Skin and body protection. Rubber or neoprene footwear. Impervious clothing materials such as rubber, neoprene, nitrile or polyvinyl chloride. Wear liquid proof rubber or neoprene gloves.

Respiratory protection
Not normally required under normal use. In case of mist, spray or aerosol exposure wear suitable personal respiratory protection and protective suit.

Hygiene measures
Handle in accordance with good industrial hygiene and safety practice. Avoid creation of mist or spray.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and chemical properties
### Physical state
- **Liquid**

### Appearance
- Clear to hazy

### Odor
- **Salty**

### Odor Threshold
- No data available

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Note • Method</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>pH @ 20 °C</strong></td>
<td>8.5 - 11.2</td>
<td></td>
</tr>
<tr>
<td><strong>Melting/freezing point</strong></td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td><strong>Boiling point/boiling range</strong></td>
<td>218 °F</td>
<td></td>
</tr>
<tr>
<td><strong>Flash Point</strong></td>
<td>Non Flammable</td>
<td></td>
</tr>
<tr>
<td><strong>Evaporation rate</strong></td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td><strong>Flammability (solid, gas)</strong></td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td><strong>Upper Flammability Limit</strong></td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td><strong>Lower Flammability Limit</strong></td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td><strong>Vapor pressure</strong></td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td><strong>Vapor density</strong></td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td><strong>Specific Gravity</strong></td>
<td>1.17 - 1.20</td>
<td></td>
</tr>
<tr>
<td><strong>Water solubility</strong></td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td><strong>Solubility in other solvents</strong></td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td><strong>Partition coefficient: n-octanol/water</strong></td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td><strong>Autoignition temperature</strong></td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td><strong>Decomposition temperature</strong></td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td><strong>Viscosity, kinematic</strong></td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td><strong>Viscosity, dynamic</strong></td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td><strong>Explosive properties</strong></td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td><strong>Oxidizing Properties</strong></td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td><strong>Softening point</strong></td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td><strong>Molecular Weight</strong></td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td><strong>VOC Content</strong></td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td><strong>Density</strong></td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td><strong>Bulk Density</strong></td>
<td>No data available</td>
<td></td>
</tr>
</tbody>
</table>

### Other information

### 10. STABILITY AND REACTIVITY

#### Reactivity
- No data available.

#### Chemical stability
- Stable under recommended storage conditions.

#### Possibility of hazardous reactions
- None under normal processing.

#### Conditions to Avoid
- None known based on information supplied.

#### Incompatible Materials

#### Hazardous Decomposition Products
- Hydrogen chloride gas is released on contact with strong mineral acids.
11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Eye contact  Contact with eyes may cause irritation.
Skin contact  Prolonged contact may cause redness and irritation.
Inhalation  May cause irritation of respiratory tract.
Ingestion  Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Serious salt poisonings in humans have occurred from both accidental and deliberate ingestion.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>LD50 Oral</th>
<th>LD50 Dermal</th>
<th>LC50 Inhalation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Chloride 7647-14-5</td>
<td>= 3 g/kg (Rat)</td>
<td>= 10 g/kg (Rabbit)</td>
<td>&gt; 42 g/m³ (Rat) 1 h</td>
</tr>
</tbody>
</table>

Information on toxicological effects

Symptoms  No data available.
Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization  No data available.
Mutagenic Effects  No data available.
Carcinogenicity  No data available.
Reproductive Toxicity  No data available.
Specific target organ systemic toxicity (single exposure)  No information available.
Specific target organ systemic toxicity (repeated exposure)  No information available.
Aspiration hazard  No information available.

Numerical measures of toxicity - Product Information

Unknown acute toxicity  0% of the mixture consists of ingredient(s) of unknown toxicity
The following values are calculated based on chapter 3.1 of the GHS document.

12. ECOLOGICAL INFORMATION

Ecotoxicity  0% of the mixture consists of component(s) of unknown hazards to the aquatic environment

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Toxicity to algae</th>
<th>Toxicity to fish</th>
<th>Toxicity to daphnia and other aquatic invertebrates</th>
</tr>
</thead>
</table>
Sodium Chloride
7647-14-5

<table>
<thead>
<tr>
<th>Persistence and degradability</th>
<th>No data available.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bioaccumulation</td>
<td>No data available.</td>
</tr>
<tr>
<td>Other adverse effects</td>
<td>No data available.</td>
</tr>
</tbody>
</table>

13. DISPOSAL CONSIDERATIONS

Waste treatment

Waste Disposal Methods
Dispose of in accordance with federal, state, and local regulations.

Contaminated packaging
Do not re-use empty containers.

14. TRANSPORT INFORMATION

Harmonized Tariff Schedule / Schedule B

HTS/Schedule B Code
2501.00.0000

DOT
Not regulated.

UNID No
N/A

TDG
Not regulated.

MEX
Not regulated.

ICAO
Not regulated.

ICAO/IATA
Not regulated.

IMDG/IMO
Not regulated.

RID
Not regulated.

ADR/RID
Not regulated.

ADN
Not regulated.

15. REGULATORY INFORMATION
USM LCM BRINE Saturated Sodium Chloride Treated

Brine

Revision Date 22-Oct-2015

International Inventories

<table>
<thead>
<tr>
<th>Inventory</th>
<th>Complies</th>
</tr>
</thead>
<tbody>
<tr>
<td>TSCA</td>
<td></td>
</tr>
<tr>
<td>DSL/NDSL</td>
<td></td>
</tr>
<tr>
<td>EINECS/ELINCS</td>
<td></td>
</tr>
<tr>
<td>ENCS</td>
<td></td>
</tr>
<tr>
<td>IECSC</td>
<td></td>
</tr>
<tr>
<td>KECL</td>
<td></td>
</tr>
<tr>
<td>PICCS</td>
<td></td>
</tr>
<tr>
<td>AICS</td>
<td></td>
</tr>
</tbody>
</table>

Legend:

- TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
- DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
- EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
- ENCS - Japan Existing and New Chemical Substances
- IECSC - China Inventory of Existing Chemical Substances
- KECL - Korean Existing and Evaluated Chemical Substances
- PICCS - Philippines Inventory of Chemicals and Chemical Substances
- AICS - Australian Inventory of Chemical Substances

U.S. Federal Regulations

SARA 313
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

<table>
<thead>
<tr>
<th>Hazard Category</th>
<th>Yes/No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Health Hazard</td>
<td>Yes</td>
</tr>
<tr>
<td>Chronic Health Hazard</td>
<td>No</td>
</tr>
<tr>
<td>Fire Hazard</td>
<td>No</td>
</tr>
<tr>
<td>Sudden Release of Pressure Hazard</td>
<td>No</td>
</tr>
<tr>
<td>Reactive Hazard</td>
<td>No</td>
</tr>
</tbody>
</table>

Clean Water Act
This product is not a substance regulated as a pollutant pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42). This product may contain trace amounts of substances regulated as pollutants under the Clean Water Act, as detailed in Section 3 herein.

CERCLA
This material, as supplied, is not a substance regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA)(40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA)(40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material. This material may contain trace amounts of substances regulated as hazardous substances under CERCLA, as detailed in Section 3 herein.

U.S. State Regulations

California Proposition 65
This product may contain trace amounts of Proposition 65 chemicals, as detailed in Section 3 herein.

U.S. State Right-to-Know Regulations

U.S. EPA Label Information
EPA Pesticide registration number Not applicable.

16. OTHER INFORMATION
### NFPA

<table>
<thead>
<tr>
<th>Health Hazard</th>
<th>Flammability</th>
<th>Instability</th>
<th>Physical and chemical hazards</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

### HMIS

<table>
<thead>
<tr>
<th>Health Hazard</th>
<th>Flammability</th>
<th>Physical Hazard</th>
<th>Personal protection</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0</td>
<td>0</td>
<td>X</td>
</tr>
</tbody>
</table>

**Prepared By**

HSE Department  
Underground Services Markham, LLC  
4800 San Felipe St.  
Houston, Texas 77056

**Revision Date**

22-Oct-2015

**Reason for Revision:**

GHS Classification

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

end