1. Identification

Product Identifier: SODIUM CHLORIDE SOLUTION
Synonyms: Saline Solution
Chemical Formula: NaCl
Recommended Use of the Chemical and Restrictions On Use: Laboratory Reagent
Manufacturer / Supplier: Puritan Products; 2290 Avenue A, Bethlehem, PA 18017 Phone: 610-866-4225
Emergency Phone Number: 24-Hour Chemtrec Emergency Telephone 800-424-9300

2. Hazard(s) Identification

Classification of the Substance or Mixture:
Acute toxicity, Oral (Category 6.1)
Eye irritation (Category 6.4A)

Risk Phrases:
Symbol: Xi
R41: Risk of serious damage to eyes.
R43: May cause sensitization by skin contact.

Label Elements:

Trade Name: SODIUM CHLORIDE SOLUTION
Signal Word: Warning

Hazard Statements:
H303: May be harmful if swallowed.
H316: Causes mild skin irritation.

Precautionary Statements:
None
3. **Composition / Information on Ingredients**

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>CAS Number</th>
<th>EC Number</th>
<th>Percent</th>
<th>Hazardous</th>
<th>Chemical Characterization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Chloride</td>
<td>7647-14-5</td>
<td>231-598-3</td>
<td>0 – 26%</td>
<td>Yes</td>
<td>Substance</td>
</tr>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>231-791-2</td>
<td>74 - 100%</td>
<td>No</td>
<td>Mixture</td>
</tr>
</tbody>
</table>

4. **First-aid Measures**

**Inhalation:** Remove to fresh air. Get medical attention for any breathing difficulty.

**Ingestion:** If large amounts were swallowed, give water to drink and get medical advice.

**Skin Contact:** Wash exposed area with soap and water. Get medical advice if irritation develops.

**Eye Contact:** Immediately flush eyes with plenty of water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get medical attention if irritation persists.

5. **Fire-fighting Measures**

**Fire:** Not considered to be a fire hazard.

**Explosion:** Not considered to be an explosion hazard.

**Fire Extinguishing Media:** Use any means suitable for extinguishing surrounding fire.

**Special Information:** In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full face piece operated in the pressure demand or other positive pressure mode.

6. **Accidental Release Measures**

**Personal Precautions, Protective Equipment and Emergency Procedures:** Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8. Isolate hazard area. Keep unnecessary and unprotected personnel from entering.

**Environmental Precautions and Methods and Materials for Containment and Cleaning Up:** Spills: Sweep up and containerize for reclamation or disposal. Vacuuming or wet sweeping may be used to avoid dust dispersal. Small amounts of residue may be flushed to sewer with plenty of water.

7. **Handling and Storage**

**Precautions for Safe Handling and Conditions for Safe Storage, Including Any Incompatibilities:** Keep in a tightly closed container. Protect from physical damage. Store in a cool, dry, ventilated area away from sources of heat, moisture and incompatibilities. Containers of this material may be hazardous when empty since they retain product residues (dust, solids); observe all warnings and precautions listed for the product.

8. **Exposure Controls / Personal Protection**

**Airborne Exposure Limits:** None established.

**Ventilation System:** In general, dilution ventilation is a satisfactory health hazard control for this substance. However, if conditions of use create discomfort to the worker, a local exhaust system should be considered.
**Personal Respirators (NIOSH Approved):** Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Skin Protection:** Wear protective gloves and clean body-covering clothing.

**Eye Protection:** Use chemical safety goggles. Maintain eye wash fountain and quick-drench facilities in work area.

### 9. Physical and Chemical Properties

**Appearance:** Clear, colorless liquid  
**Odor:** Odorless  
**Odor Threshold:** Not determined  
**pH:** 6.7 - 7.3 (aqueous solution)  
**% Volatiles by volume @ 21°C (70°F):** 0  
**Melting Point:** 801°C (1474°F)  
**Boiling Point / Boiling Range:** 1413°C (2575°F)  
**Flash Point:** No information found  
**Evaporation Rate (BuAc=1):** No information found  
**Flammability:** Not applicable  
**Upper / Lower Flammability or Explosive Limits:** Not applicable  
**Vapor Pressure (mm Hg):** 1.0 @ 86°C (158°F)  
**Vapor Density (Air=1):** 2.1650 g / cm³  
**Relative Density:** 2.1650 g/cm³  
**Solubility:** 36g/100cc water @ 20°C (68°F)  
**Partition Coefficient:** n-octanol / water: No data available  
**Auto-ignition Temperature:** No data available  
**Decomposition Temperature:** No data available  
**Viscosity:** No data available

### 10. Stability and Reactivity

**Reactivity and / or Chemical Stability:** Stable under ordinary conditions of use and storage. Hygroscopic.

**Possibility of Hazardous Reactions and Conditions to Avoid:** Excessive heat, incompatibles.

**Incompatible Materials:** Lithium, bromine trifluoride, strong oxidizing agents.

**Hazardous Decomposition Products:** When heated to above 801°C (1474°F) it emits toxic fumes of chloride and sodium oxide.

### 11. Toxicological Information

**Emergency Overview:** WARNING! CAUSES EYE IRRITATION.

**Potential Health Effects:**

**Inhalation:** May cause mild irritation to the respiratory tract.

**Ingestion:** Very large doses can cause vomiting, diarrhea, and prostration. Dehydration and congestion occur in most internal organs. Hypertonic salt solutions can produce violent inflammatory reactions in the gastrointestinal tract.

**Skin Contact:** May irritate damaged skin; absorption can occur with effects similar to those via ingestion.

**Eye Contact:** Causes irritation, redness, and pain. (For salt concentrations greater than the normal saline present.)
Chronic Exposure: No information found.

Aggravation of Pre-existing Conditions: No information found.

Specific Target Organ Toxicity - Single Exposure (Globally Harmonized System): No data available.

Specific Target Organ Toxicity - Repeated Exposure (Globally Harmonized System): No data available.

Numerical Measures of Toxicity: Cancer Lists: NTP Carcinogen

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Known</th>
<th>Anticipated</th>
<th>IARC Category</th>
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</thead>
<tbody>
<tr>
<td>Sodium Chloride (7647-14-5)</td>
<td>No</td>
<td>No</td>
<td>None</td>
</tr>
<tr>
<td>Water (7732-18-5)</td>
<td>No</td>
<td>No</td>
<td>None</td>
</tr>
</tbody>
</table>

Acute Toxicity:
Oral rat LD50: 3000 mg/kg / Inhalation rat LC50: > 42 gm/m3 /1H. Skin rabbit LD50: > 10 gm/kg. Investigated as a mutagen, reproductive effector.

12. Ecological Information

Ecotoxicity: This material is expected to be toxic to aquatic life.

Persistence and Degradability: Expected to be readily biodegradable.

Bioaccumulative Potential: This material is not expected to significantly bioaccumulate.

Mobility in Soil: No information found.

Other adverse effects: No information found.

13. Disposal Considerations

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

14. Transport Information

Land Transport ADR/RID and GGVS/GGVE (Cross Border / Domestic)
Not regulated

Maritime Transport IMDG/GGVSea
Not regulated

Air Transport ICAO-TI and IATA-DGR
Not regulated

15. Regulatory Information

Chemical Inventory Status – Part 1

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>TSCA</th>
<th>EC</th>
<th>Japan</th>
<th>Australia</th>
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<tbody>
<tr>
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<td>Yes</td>
<td>Yes</td>
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### Chemical Inventory Status – Part 2

<table>
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<tr>
<th>Ingredient</th>
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### Federal, State & International Regulations - Part 1

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>SARA 302</th>
<th>SARA 313</th>
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<tbody>
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### Federal, State & International Regulations - Part 2

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<th>Ingredient</th>
<th>RCRA</th>
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### Chemical Weapons Convention:

- TSCA 12(b): No
- CDTA: No

### SARA 311/312:

- Acute: Yes
- Chronic: No
- Fire: No
- Pressure: No

### Reactivity:

- Mixture / Liquid

### Other Information

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