



## Safety Data Sheet

Classified According to OSHA Hazard Communication Standard (HCS 2024)

### SECTION 1: Identification

#### 1.1. Product Identifier

**Trade Name or Designation** Sodium Hydroxide - Chloride, 50% / 1% (w/v)

**Product Number** R7478100

**Other Identifying Product Numbers** R7478100-1A

#### 1.2. Recommended Use and Restrictions on Use

General Laboratory Reagent

#### 1.3. Details of the Supplier of the Safety Data Sheet

**Company** Ricca Chemical Company

**Address** 412 West Fork Drive

Arlington, TX 76012 USA

**Telephone** 888-467-4222

#### 1.4. Emergency Telephone Number (24 hours)

CHEMTREC (USA) 800-424-9300

CHEMTREC (International) 1+ 703-527-3887

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### SECTION 2: Hazard(s) Identification

#### 2.1. Classification of the Substance or Mixture

| Hazard Class                        | Category   | Hazard Statements | Precautionary Statements                                                                                |
|-------------------------------------|------------|-------------------|---------------------------------------------------------------------------------------------------------|
| Skin Corrosion / Irritation         | Category 1 | H314              | P260,P264,P280,P301+P330+P331,<br>P303+P361+P353,P363,P304+P340,<br>P310,P321,P305+P351+P338,P405, P501 |
| Serious Eye Damage / Eye Irritation | Category 1 | H318              | P280,P305+P351+P338,P310                                                                                |

#### 2.2. GHS Label Elements

Pictograms:



Signal Word: **Danger**

Hazard Statements:

NOTE: Hazard statements may be combined on labels to improve clarity and readability.

| Hazard Number | Hazard Statement                        |
|---------------|-----------------------------------------|
| H314          | Causes severe skin burns and eye damage |

Precautionary Statements:

NOTE: Precautionary statements may be combined or consolidated on labels to improve clarity and readability.

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### Prevention

| Precautionary Number | Precautionary Statement                               |
|----------------------|-------------------------------------------------------|
| P260                 | Do not breathe fumes or mist.                         |
| P264                 | Wash hands, arms, and face thoroughly after handling. |
| P280                 | Wear protective gloves and eye protection.            |

### Response

| Precautionary Number | Precautionary Statement                                                                                                          |
|----------------------|----------------------------------------------------------------------------------------------------------------------------------|
| P301+P330+P331       | IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.                                                                               |
| P303+P361+P353       | IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.                           |
| P304+P340            | IF INHALED: Remove person to fresh air and keep comfortable for breathing.                                                       |
| P305+P351+P338       | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P310                 | Immediately call a poison center or doctor.                                                                                      |
| P363                 | Wash contaminated clothing before reuse.                                                                                         |

### Storage

| Precautionary Number | Precautionary Statement |
|----------------------|-------------------------|
| P405                 | Store locked up.        |

### Disposal

| Precautionary Number | Precautionary Statement                                                                                                         |
|----------------------|---------------------------------------------------------------------------------------------------------------------------------|
| P501                 | Dispose of contents/container to suitable waste stream in accordance with local, state, federal, and international regulations. |

### 2.3. Hazards not Otherwise Classified

No other hazards identified.

### 2.4. Ingredients of Unknown Acute Toxicity

35.8 percent of this mixture consists of ingredient(s) of unknown acute toxicity (all routes).

## SECTION 3: Composition / Information on Ingredients

### 3.1. Components of Mixture

| Chemical Name (IUPAC) | Common Name and Synonyms       | CAS Number | Weight% |
|-----------------------|--------------------------------|------------|---------|
| water                 | Water                          | 7732-18-5  | 63.54   |
| sodium hydroxide      | Sodium Hydroxide; caustic soda | 1310-73-2  | 35.75   |
| sodium chloride       | Sodium Chloride; Salt          | 7647-14-5  | 0.71    |

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## SECTION 4: First-Aid Measures

### 4.1. Description of Necessary Measures

**Eye Contact:** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Corrosive! Causes irritation and burns. Can cause burns that may lead to permanent impairment of vision, including blindness.

**Ingestion:** IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Dilute with water or milk. Call a physician if necessary.

**Inhalation:** IF INHALED: Remove person to fresh air and keep comfortable for breathing.

**Skin Contact:** IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. May cause irritation, redness, itching and pain, especially on damaged or broken skin.

### 4.2. Most Important Symptoms and Effects, Acute and Delayed

Causes severe skin burns and eye damage May cause irritation to the eyes and skin. Wash areas of contact with water. Call a physician if irritation develops. Does not present any significant health hazards. EYE CONTACT: May cause irritation, redness, pain, and tearing. SKIN CONTACT: May cause irritation, redness, itching and pain, especially on damaged or broken skin.

### 4.3. Immediate Medical Attention or Special Treatment Needed

Immediately call a poison center or doctor. Irrigate immediately with large quantity of water for at least 15 minutes. Call a physician if irritation develops. Remove to fresh air. Give artificial respiration if necessary. If breathing is difficult, give oxygen. Flush with plenty of water for at least 15 minutes. Call a physician if irritation develops. Dilute with water or milk. Call a physician if necessary.

## SECTION 5: Fire-Fighting Measures

### 5.1. Extinguishing Media

Use any means suitable for extinguishing surrounding fire.

### 5.2. Specific Hazards Arising from the Substance or Mixture in a Fire

Not considered to be a fire or explosion hazard.

### 5.3. Special Protective Equipment and Precautions for Firefighters

Wear special protective clothing and positive pressure self-contained breathing apparatus. Butyl rubber, natural rubber, Neoprene, nitrile rubber, polyethylene, polyvinyl chloride, Teflon, Viton, or Saranex barrier recommended.

## SECTION 6: Accidental Release Measures

### 6.1. Personal Precautions, Protective Equipment and Emergency Procedures

Wear protective gloves and eye protection.

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### 6.2. Cleanup and Containment Methods and Materials

Collect liquid and dilute with water. Neutralize with dilute acid solutions. Release to drain if local regulations allow. For larger spills, absorb with suitable material (vermiculite, clay, etc.). Collect the solid residue and save for disposal.

## SECTION 7: Handling and Storage

### 7.1. Precautions for Safe Handling and Storage Conditions

Store locked up. As with all chemicals, wash hands thoroughly after handling. Avoid contact with eyes and skin. Protect from freezing and physical damage.

## SECTION 8: Exposure Controls / Personal Protection

### 8.1. Exposure Limits

#### U.S. OSHA - Permissible Exposure Limits (PEL) - Time Weighted Averages (TWA)

| Chemical Name    | CAS Number | Exposure Limit |
|------------------|------------|----------------|
| Sodium Hydroxide | 1310-73-2  | 2 mg/m3 TWA    |

#### U.S. OSHA - Permissible Exposure Limits (PEL) - Ceiling Limits

No limits found.

#### U.S. OSHA - Permissible Exposure Limits (PEL) - Short Term Exposure Limits (STEL)

No limits found.

#### U.S. OSHA - Specifically Regulated Chemicals

No limits found.

#### ACGIH - Threshold Limit Values - Ceilings (TLV-C)

| Chemical Name    | CAS Number | Exposure Limit  |
|------------------|------------|-----------------|
| Sodium Hydroxide | 1310-73-2  | 2 mg/m3 Ceiling |

#### ACGIH - Threshold Limit Values - Short Term Exposure Limits (TLV-STEL)

No limits found.

#### ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA)

No limits found.

### 8.2. Engineering Controls

No specific controls are needed. Normal room ventilation is adequate.

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## 8.3. Individual Protective Measures and Personal Protective Equipment

**Respiratory Protection:** Normal room ventilation is adequate.

**Skin Protection:** Chemical resistant gloves.

**Eye Protection:** Safety glasses or goggles.

## SECTION 9: Physical and Chemical Properties

### 9.1. Basic Physical and Chemical Properties

**Physical State:** liquid

**Color:** Colorless

**Odor:** Data not available.

**Odor Threshold:** Data not available.

**Melting/Freezing Point:** Data not available.

**Boiling Point/Range:** Data not available.

**Flammability:** Data not available.

**Flammability/Explosive Limits:** Data not available.

**Flash Point:** Not flammable

**Auto-Ignition Temperature:** Data not available.

**Decomposition Temperature:** Data not available.

**pH:** > 13

**Kinematic Viscosity:** Data not available.

**Solubility:** miscible

**Vapor Pressure:** Data not available.

**Evaporation Rate:** Data not available.

**Relative Density:** 1.4

**Relative Vapor Density:** Data not available.

**Particle Characteristics:** Data not available.

**Partition Coefficient n-octanol/water, log** Data not available.

## SECTION 10: Stability and Reactivity

### 10.1. Reactivity and Chemical Stability

Stable under normal conditions of use and storage.

### 10.2. Possibility of Hazardous Reactions

Data not available.

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### 10.3. Conditions to Avoid and Incompatible Materials

Strong oxidizing agents, Lithium, Bromine Trifluoride. Acids, organic halogen compounds, metals such as aluminum, tin and zinc.

### 10.4. Hazardous Decomposition Products

Will not occur.

## SECTION 11: Toxicological Information

### 11.1. Information on Toxicological Effects

#### Acute Toxicity - Oral Exposure:

Not acutely toxic.

| Chemical Name   | CAS Number | Toxicity                                |
|-----------------|------------|-----------------------------------------|
| Sodium Chloride | 7647-14-5  | Oral LD50 Rat 3550 mg/kg (Source: ECHA) |

#### Acute Toxicity - Dermal Exposure:

No information found.

| Chemical Name   | CAS Number | Toxicity                                                           |
|-----------------|------------|--------------------------------------------------------------------|
| Sodium Chloride | 7647-14-5  | Dermal LD50 Rabbit >10000 mg/kg (no deaths occurred, Source: ECHA) |

#### Acute Toxicity - Inhalation Exposure:

No information found.

| Chemical Name   | CAS Number | Toxicity                                                                         |
|-----------------|------------|----------------------------------------------------------------------------------|
| Sodium Chloride | 7647-14-5  | Inhalation LC50 Rat >42 mg/L 1 h (no deaths occurred, aerosol, Source: ECHA_API) |

### 11.2 Carcinogenicity:

#### International Agency for Research on Cancer (IARC)

| Chemical Name  | CAS Number | Classification |
|----------------|------------|----------------|
| No data found. |            |                |

#### National Toxicology Program (NTP)

| Chemical Name  | CAS Number | Classification |
|----------------|------------|----------------|
| No data found. |            |                |

#### U.S. OSHA specifically regulated carcinogens

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| Chemical Name  | CAS Number | Classification |
|----------------|------------|----------------|
| No data found. |            |                |

### 11.3 Additional Toxicology Information:

Causes severe skin burns and eye damage.

## SECTION 12: Ecological Information

### 12.1. Ecotoxicity

| Chemical Name    | CAS Number | Species         | Exposure | Toxicity                                                                                                                                                                                                                                                                                                                                                                                     |
|------------------|------------|-----------------|----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Sodium Chloride  | 7647-14-5  | Earthworm       | Acute    | LC50 48 h Eisenia foetida 0.1 - 1 mg/cm2 [filter paper] (IUCLID)                                                                                                                                                                                                                                                                                                                             |
| Sodium Hydroxide | 1310-73-2  | Freshwater Fish | Acute    | LC50 96 h Oncorhynchus mykiss 45.4 mg/L [static] (IUCLID)                                                                                                                                                                                                                                                                                                                                    |
| Sodium Chloride  | 7647-14-5  | Freshwater Fish | Acute    | LC50 96 h Lepomis macrochirus 5560 - 6080 mg/L [flow-through] (EPA); LC50 96 h Lepomis macrochirus 12946 mg/L [static] (EPA); LC50 96 h Pimephales promelas 6020 - 7070 mg/L [static] (EPA); LC50 96 h Pimephales promelas 7050 mg/L [semi-static] (EPA); LC50 96 h Pimephales promelas 6420 - 6700 mg/L [static] (EPA); LC50 96 h Oncorhynchus mykiss 4747 - 7824 mg/L [flow-through] (EPA) |
| Sodium Chloride  | 7647-14-5  | Water Flea      | Acute    | EC50 48 h Daphnia magna 1000 mg/L (IUCLID); EC50 48 h Daphnia magna 340.7 - 469.2 mg/L [Static] (EPA)                                                                                                                                                                                                                                                                                        |

### 12.2. Persistence and Degradability

Data not available.

### 12.3. Bioaccumulative Potential

Data not available.

### 12.4. Mobility in soil

Data not available.

### 12.5. Other Adverse Ecological Effects

Data not available.

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## SECTION 13: Disposal Considerations

### 13.1. Waste Treatment Methods

Data not available.

## SECTION 14: Transportation Information

### 14.1 Transportation by Land - Department of Transportation (DOT, United States of America)

**Sizes:** 1 L

**UN Number:** UN1824

**Proper Shipping Name:** Sodium Hydroxide Solution

**Hazard Class:** 8

**Packing Group:** II

**Hazard Label(s):**



### 14.2 Transportation by Air - International Air Transport Association (IATA)

**Sizes:** 1 L

**UN Number:** UN1824

**Proper Shipping Name:** Sodium Hydroxide Solution

**Hazard Class:** 8

**Packing Group:** II

**Hazard Label(s):**





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### 14.3 Transportation of Dangerous Goods (TDG, Canada)

**Sizes:** 1 L

**UN Number:** UN1824

**Proper Shipping Name:** SODIUM HYDROXIDE SOLUTION

**Hazard Class:** 8

**Packing Group:** II

**Hazard Label(s):**



## SECTION 15: Regulatory Information

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### 15.01. Occupational Safety and Health Administration (OSHA) Hazards

| Chemical Name  | CAS Number | Regulatory Information |
|----------------|------------|------------------------|
| No data found. |            |                        |

### 15.02. Superfund Amendments and Reauthorization Act (SARA) 302 Extremely Hazardous Substances

| Chemical Name  | CAS Number | RQ |
|----------------|------------|----|
| No data found. |            |    |

### 15.03. Superfund Amendments and Reauthorization Act (SARA) 311/312 Hazardous Chemicals

| Chemical Name    | CAS Number | Regulatory Information            |
|------------------|------------|-----------------------------------|
| Sodium Hydroxide | 1310-73-2  | 1000 lb final RQ; 454 kg final RQ |

### 15.04. Superfund Amendments and Reauthorization Act (SARA) 313 Toxics Release Inventory (TRI)

| Chemical Name  | CAS Number | List |
|----------------|------------|------|
| No data found. |            |      |

### 15.05. Massachusetts Right-to-Know Substance List

| Chemical Name    | CAS Number | Regulatory Information |
|------------------|------------|------------------------|
| Sodium Hydroxide | 1310-73-2  | Present                |

### 15.06. Pennsylvania Right-to-Know Hazardous Substances

| Chemical Name    | CAS Number | Regulatory Information |
|------------------|------------|------------------------|
| Sodium Hydroxide | 1310-73-2  | Environmental hazard   |

### 15.07. New Jersey Worker and Community Right-to-Know Components

| Chemical Name    | CAS Number | Regulatory Information |
|------------------|------------|------------------------|
| Sodium Hydroxide | 1310-73-2  | sn 1706                |

### 15.08. California Proposition 65

| Chemical Name  | CAS Number | Regulatory Information |
|----------------|------------|------------------------|
| No data found. |            |                        |

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### 15.09. Canada Domestic Substances List / Non-Domestic Substances List (DSL/NDSL)

| Chemical Name    | CAS Number | List | Status  |
|------------------|------------|------|---------|
| Sodium Hydroxide | 1310-73-2  | DSL  | Present |
| Sodium Chloride  | 7647-14-5  | DSL  | Present |
| Water            | 7732-18-5  | DSL  | Present |

### 15.10. United States of America Toxic Substances Control Act (TSCA) List

| Chemical Name    | CAS Number | Status                |
|------------------|------------|-----------------------|
| Sodium Hydroxide | 1310-73-2  | Present (ACTIVE)      |
| Sodium Chloride  | 7647-14-5  | Present (ACTIVE)      |
| Water            | 7732-18-5  | Present [XU] (ACTIVE) |

### 15.11. European Inventory of Existing Commercial Chemical Substances (EINECS), European List of Notified Chemical Substances (ELINCS), and No Longer Polymers (NLP)

| Chemical Name    | CAS Number | List   | Number    |
|------------------|------------|--------|-----------|
| Sodium Hydroxide | 1310-73-2  | EINECS | 215-185-5 |
| Sodium Chloride  | 7647-14-5  | EINECS | 231-598-3 |
| Water            | 7732-18-5  | EINECS | 231-791-2 |

### 15.12. China - Inventory of Existing chemical Substances (IECSC)

| Chemical Name    | CAS Number | Status          |
|------------------|------------|-----------------|
| Sodium Hydroxide | 1310-73-2  | Present [27689] |
| Sodium Chloride  | 7647-14-5  | Present [24102] |
| Water            | 7732-18-5  | Present [32224] |

### 15.13. Korea - Existing Chemicals Inventory (KECI/KECL)

| Chemical Name    | CAS Number | List    | Status             |
|------------------|------------|---------|--------------------|
| Sodium Hydroxide | 1310-73-2  | Annex 1 | Present [KE-31487] |
| Sodium Chloride  | 7647-14-5  | Annex 1 | Present [KE-31387] |
| Water            | 7732-18-5  | Annex 1 | Present [KE-35400] |

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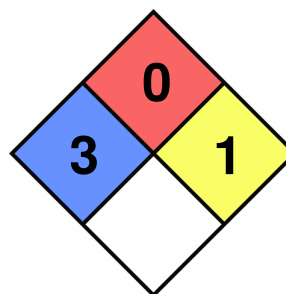
### 15.14. Japan - Existing and New Chemical Substances Inventory (ENCS)

| Chemical Name    | CAS Number | MITI No.                                         |
|------------------|------------|--------------------------------------------------|
| Sodium Hydroxide | 1310-73-2  | (1)-410                                          |
| Sodium Chloride  | 7647-14-5  | (1)-236                                          |
| Water            | 7732-18-5  | - (listed on Japanese Pharmacopoeia 8th Edition) |

## SECTION 16: Other Information

### 16.1 National Fire Protection Associate (NFPA) Rating

**Health:** 3  
**Flammability:** 0  
**Reactivity:** 1  
**Special Hazard:**



### 16.2 Document Revision

**Last Revision Date:**  
 2026-05-05

## DISCLAIMER

When handled properly by qualified personnel, the product described herein does not present a significant health or safety hazard. Alteration of its characteristics by concentration, evaporation, addition of other substances, or other means may present hazards not specifically addressed herein and which must be evaluated by the user. The information furnished herein is believed to be accurate and represents the best data currently available to us. No warranty, expressed or implied, is made and RICCA CHEMICAL COMPANY assumes no legal responsibility or liability whatsoever resulting from its use.