

**Material Safety Data Sheet**

Version 3.1  
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**1. PRODUCT AND COMPANY IDENTIFICATION**

Product name : **Sodium chloride**

Product Number : S9888  
Brand : Sigma-Aldrich

Company : Sigma-Aldrich  
3050 Spruce Street  
SAINT LOUIS MO 63103  
USA

Telephone : +18003255832  
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**2. COMPOSITION/INFORMATION ON INGREDIENTS**

Formula : NaCl  
Molecular Weight : 58.44 g/mol

CAS-No.	EC-No.	Index-No.	Concentration [%]
<b>Sodium chloride</b>			
7647-14-5	231-598-3	-	-

**3. HAZARDS IDENTIFICATION****Emergency Overview****OSHA Hazards**

Mild skin irritant  
Mild eye irritant

**HMIS Classification**

**Health Hazard:** 1  
**Flammability:** 0  
**Physical hazards:** 0

**NFPA Rating**

**Health Hazard:** 1  
**Fire :** 0  
**Reactivity Hazard:** 0

**Potential Health Effects**

**Inhalation** May be harmful if inhaled. May cause respiratory tract irritation.  
**Skin** May be harmful if absorbed through skin. May cause skin irritation.  
**Eyes** May cause eye irritation.  
**Ingestion** May be harmful if swallowed.

#### 4. FIRST AID MEASURES

**If inhaled**

If breathed in, move person into fresh air. If not breathing give artificial respiration

**In case of skin contact**

Wash off with soap and plenty of water.

**In case of eye contact**

Flush eyes with water as a precaution.

**If swallowed**

Never give anything by mouth to an unconscious person. Rinse mouth with water.

#### 5. FIRE-FIGHTING MEASURES

**Flammable properties**

Flash point not applicable

Ignition temperature no data available

**Suitable extinguishing media**

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

**Special protective equipment for fire-fighters**

Wear self contained breathing apparatus for fire fighting if necessary.

**Further information**

The product itself does not burn.

#### 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions**

Avoid dust formation.

**Environmental precautions**

Do not let product enter drains.

**Methods for cleaning up**

Sweep up and shovel. Keep in suitable, closed containers for disposal.

#### 7. HANDLING AND STORAGE

**Handling**

Provide appropriate exhaust ventilation at places where dust is formed.

**Storage**

Keep container tightly closed in a dry and well-ventilated place.

#### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Contains no substances with occupational exposure limit values.

**Personal protective equipment****Respiratory protection**

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).

**Hand protection**

Handle with gloves.

**Eye protection**

Safety glasses

**Hygiene measures**

General industrial hygiene practice.

**9. PHYSICAL AND CHEMICAL PROPERTIES****Appearance**

Form	solid
Colour	colourless

**Safety data**

pH	7
Melting point	801 °C (1,474 °F)
Boiling point	1,413 °C (2,575 °F)
Flash point	not applicable
Ignition temperature	no data available
Lower explosion limit	no data available
Upper explosion limit	no data available
Vapour pressure	1.33 hPa (1.00 mmHg) at 865 °C (1,589 °F)
Density	2.1650 g/cm <sup>3</sup>
Water solubility	soluble

**10. STABILITY AND REACTIVITY****Storage stability**

Stable under recommended storage conditions.

**Materials to avoid**

Strong oxidizing agents

**Hazardous decomposition products****Hazardous decomposition products formed under fire conditions.**

Sodium/sodium oxides, Hydrogen chloride gas

**11. TOXICOLOGICAL INFORMATION****Acute toxicity**

LD50 Oral - rat - 3,000 mg/kg

LC50 Inhalation - rat - 1 h - > 42,000 mg/m<sup>3</sup>

LD50 Dermal - rabbit - > 10,000 mg/kg

**Irritation and corrosion**

Skin - rabbit - Mild skin irritation - 24 h

Eyes - rabbit - Mild eye irritation

**Sensitization**

no data available

**Chronic exposure**

no data available

## Signs and Symptoms of Exposure

Vomiting, Diarrhoea, Dehydration and congestion may occur in internal organs. Hypertonic salt solutions can produce inflammatory reactions in the gastrointestinal tract.

## Potential Health Effects

<b>Inhalation</b>	May be harmful if inhaled. May cause respiratory tract irritation.
<b>Skin</b>	May be harmful if absorbed through skin. May cause skin irritation.
<b>Eyes</b>	May cause eye irritation.
<b>Ingestion</b>	May be harmful if swallowed.

## 12. ECOLOGICAL INFORMATION

### Elimination information (persistence and degradability)

no data available

### Ecotoxicity effects

Toxicity to fish	LC50 - <i>Lepomis macrochirus</i> (Bluegill) - 1,294.6 mg/l - 96 h NOEC - <i>Pimephales promelas</i> (fathead minnow) - 4,000 mg/l - 7 d
Toxicity to daphnia and other aquatic invertebrates.	NOEC - <i>Daphnia</i> - 1,500 mg/l - 7 d  LC50 - <i>Daphnia magna</i> (Water flea) - 1,661 mg/l - 48 h

### Further information on ecology

no data available

## 13. DISPOSAL CONSIDERATIONS

### Product

Observe all federal, state, and local environmental regulations. Contact a licensed professional waste disposal service to dispose of this material.

### Contaminated packaging

Dispose of as unused product.

## 14. TRANSPORT INFORMATION

### DOT (US)

Not dangerous goods

### IMDG

Not dangerous goods

### IATA

Not dangerous goods

## 15. REGULATORY INFORMATION

### OSHA Hazards

Mild skin irritant, Mild eye irritant

### TSCA Status

On TSCA Inventory

### DSL Status

All components of this product are on the Canadian DSL list.

**SARA 302 Components**

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components**

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**SARA 311/312 Hazards**

Acute Health Hazard

**Massachusetts Right To Know Components**

No Components Listed

**Pennsylvania Right To Know Components**

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Revision Date

**New Jersey Right To Know Components**

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**California Prop. 65 Components**

This product does not contain any chemicals known to State of California to cause cancer, birth, or any other reproductive defects.

**16. OTHER INFORMATION****Further information**

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