1. PRODUCT AND COMPANY IDENTIFICATION

Product name: Sodium chloride
Product Number: S3014
Brand: Sigma
Supplier: Sigma-Aldrich
3050 Spruce Street
SAINT LOUIS MO 63103
USA
Telephone: +1 800-325-5832
Fax: +1 800-325-5052
Emergency Phone #: (314) 776-6555
Preparation Information: Sigma-Aldrich Corporation
Product Safety - Americas Region
1-800-521-8956

2. HAZARDS IDENTIFICATION

Emergency Overview
OSHA Hazards
No known OSHA hazards

GHS Classification
Acute toxicity, Oral (Category 5)
Skin irritation (Category 3)

GHS Label elements, including precautionary statements
Pictogram: none
Signal word: Warning
Hazard statement(s)
H303: May be harmful if swallowed.
H316: Causes mild skin irritation.
Precautionary statement(s): none

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.
3. COMPOSITION/INFORMATION ON INGREDIENTS

Formula: ClNa
Molecular Weight: 58.44 g/mol

No ingredients are hazardous according to OSHA criteria.

4. FIRST AID MEASURES

**General advice**
Consult a physician. Show this safety data sheet to the doctor in attendance.

**If inhaled**
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**In case of skin contact**
Wash off with soap and plenty of water. Consult a physician.

**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. Consult a physician.

5. FIREFIGHTING MEASURES

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

**Special protective equipment for firefighters**
Wear self contained breathing apparatus for fire fighting if necessary.

**Hazardous combustion products**
Hazardous decomposition products formed under fire conditions. - Hydrogen chloride gas, Sodium oxides

**Further information**
The product itself does not burn.

6. ACCIDENTAL RELEASE MEASURES

**Personal precautions**
Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Avoid breathing dust.

**Environmental precautions**
Do not let product enter drains.

**Methods and materials for containment and cleaning up**
Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

**Precautions for safe handling**
Avoid formation of dust and aerosols.
Provide appropriate exhaust ventilation at places where dust is formed.

**Conditions for safe 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. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove’s outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Immersion protection
Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: > 480 min
Material tested:Dermatril® (Aldrich Z677272, Size M)

Splash protection
Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: > 30 min
Material tested:Dermatril® (Aldrich Z677272, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 873000, e-mail sales@kcl.de, test method: EN374
If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an Industrial Hygienist familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

Eye protection
Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin and body protection
Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific workplace. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Hygiene measures
Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance
Form crystalline
Colour colourless

Safety data
pH 7
Melting point/freezing point Melting point/range: 801 °C (1,474 °F)
Boiling point 1,413 °C (2,575 °F)
Flash point no data available
Ignition temperature no data available
Autoignition no data available
temperature
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/cm³
Water solubility  soluble
Partition coefficient: n-octanol/water  no data available
Relative vapour density  no data available
Odour  no data available
Odour Threshold  no data available
Evaporation rate  no data available

10. STABILITY AND REACTIVITY

Chemical stability
Stable under recommended storage conditions.

Possibility of hazardous reactions
no data available

Conditions to avoid
no data available

Materials to avoid
Strong oxidizing agents

Hazardous decomposition products
Hazardous decomposition products formed under fire conditions. - Hydrogen chloride gas, Sodium oxides
Other decomposition products - no data available

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Oral LD50
no data available

Inhalation LC50
LC50 Inhalation - rat - 1 h - > 42,000 mg/m³

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

Other information on acute toxicity
no data available

Skin corrosion/irritation
no data available

Serious eye damage/eye irritation
no data available

Respiratory or skin sensitization
no data available

Germ cell mutagenicity
no data available

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as
probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**Reproductive toxicity**

no data available

**Teratogenicity**

no data available

**Specific target organ toxicity - single exposure (Globally Harmonized System)**

no data available

**Specific target organ toxicity - repeated exposure (Globally Harmonized System)**

no data available

**Aspiration hazard**

no data available

**Potential health effects**

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

**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.

**Synergistic effects**

no data available

**Additional Information**

RTECS: VZ4725000

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**12. ECOLOGICAL INFORMATION**

**Toxicity**

no data available

- **Toxicity to daphnia and other aquatic invertebrates**
  - NOEC - Daphnia - 1,500 mg/l - 7 d
  - LC50 - Daphnia magna (Water flea) - 1,661 mg/l - 48 h

**Persistence and degradability**

no data available

**Bioaccumulative potential**

no data available

**Mobility in soil**

no data available

**PBT and vPvB assessment**

no data available

**Other adverse effects**
13. DISPOSAL CONSIDERATIONS

Product
Offer surplus and non-recyclable solutions to a licensed disposal company.

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
No known OSHA hazards

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
No SARA Hazards

Massachusetts Right To Know Components
No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know Components

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<thead>
<tr>
<th>Component</th>
<th>CAS-No.</th>
<th>Revision Date</th>
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<tbody>
<tr>
<td>Sodium chloride</td>
<td>7647-14-5</td>
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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 defects, or any other reproductive harm.

16. OTHER INFORMATION

Further information
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