## 1. PRODUCT AND COMPANY IDENTIFICATION

### 1.1 Product identifiers

Product name : Sodium chloride
Product Number : S7653
Brand : Sigma-Aldrich
CAS-No. : 7647-14-5
1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Synthesis of substances
1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich
3050 Spruce Street
SAINT LOUIS MO 63103
USA
Telephone : +1 800-325-5832
Fax : +1 800-325-5052

### 1.4 Emergency telephone number

Emergency Phone \# : +1-703-527-3887 (CHEMTREC)

## 2. HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

Not a hazardous substance or mixture.
2.2 GHS Label elements, including precautionary statements

Not a hazardous substance or mixture.
2.3 Hazards not otherwise classified (HNOC) or not covered by GHS - none

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1 Substances

| Formula | $: \mathrm{NaCl}$ |
| :--- | :---: |
| Molecular weight | $\vdots 58.44 \mathrm{~g} / \mathrm{mol}$ |
| CAS-No. | $\vdots 7647-14-5$ |
| EC-No. | $\vdots 231-598-3$ |
| Registration number | $: 01-219485491-33-$ XXXX |

No components need to be disclosed according to the applicable regulations.

## 4. FIRST AID MEASURES

### 4.1 Description of 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.

### 4.2 Most important symptoms and effects, both acute and delayed <br> The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11 <br> 4.3 Indication of any immediate medical attention and special treatment needed <br> No data available

## 5. FIREFIGHTING MEASURES

### 5.1 Extinguishing media

Suitable extinguishing media
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

### 5.2 Special hazards arising from the substance or mixture

No data available

### 5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

### 5.4 Further information

No data available

## 6. ACCIDENTAL RELEASE MEASURES

### 6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Avoid breathing dust. For personal protection see section 8.

### 6.2 Environmental precautions

Do not let product enter drains.

### 6.3 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.

### 6.4 Reference to other sections

For disposal see section 13.

## 7. HANDLING AND STORAGE

### 7.1 Precautions for safe handling

Avoid formation of dust and aerosols.Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into consideration before additional processing occurs.
Provide appropriate exhaust ventilation at places where dust is formed.
For precautions see section 2.2.
7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place.
Storage class (TRGS 510): 13: Non Combustible Solids

### 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters

Components with workplace control parameters
Contains no substances with occupational exposure limit values.

### 8.2 Exposure controls

## Appropriate engineering controls

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

## Personal protective equipment

## Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

## Skin 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.

Full contact
Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 480 min
Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M)
Splash contact
Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 480 min
Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M)
data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, 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 and safety officer 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.

## Body Protection

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

## 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).
Control of environmental exposure
Do not let product enter drains.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties
a) Appearance
b) Odour
Form: solid Colour: colourless
c) Odour Threshold
No data available
d) pH
No data available
e) Melting point/freezing
Melting point/range: $801^{\circ} \mathrm{C}\left(1,474{ }^{\circ} \mathrm{F}\right)$
point
f) Initial boiling point and $1,413^{\circ} \mathrm{C}\left(2,575{ }^{\circ} \mathrm{F}\right)$
boiling range
g) Flash point No data available
h) Evaporation rate No data available
i) Flammability (solid, gas) No data available
j) Upper/lower No data available flammability or explosive limits
k) Vapour pressure $\quad 1.33 \mathrm{hPa}(1.00 \mathrm{mmHg})$ at $865^{\circ} \mathrm{C}\left(1,589{ }^{\circ} \mathrm{F}\right)$
I) Vapour density No data available
m) Relative density $\quad 2.1650 \mathrm{~g} / \mathrm{cm} 3$
n) Water solubility $\quad 358 \mathrm{~g} / \mathrm{l}$ at $20^{\circ} \mathrm{C}\left(68^{\circ} \mathrm{F}\right)$ - soluble
o) Partition coefficient: n - No data available octanol/water
p) Auto-ignition No data available temperature
q) Decomposition No data available temperature
r) Viscosity No data available
s) Explosive properties No data available
t) Oxidizing properties No data available

### 9.2 Other safety information

No data available

## 10. STABILITY AND REACTIVITY

### 10.1 Reactivity

No data available

### 10.2 Chemical stability

Stable under recommended storage conditions.

### 10.3 Possibility of hazardous reactions

No data available

### 10.4 Conditions to avoid

No data available

### 10.5 Incompatible materials

Strong oxidizing agents

### 10.6 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Hydrogen chloride gas, Sodium oxides Other decomposition products - No data available In the event of fire: see section 5

## 11. TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

## Acute toxicity

LD50 Oral - Rat - $3,550 \mathrm{mg} / \mathrm{kg}$
LC50 Inhalation - Rat - $1 \mathrm{~h}->42,000 \mathrm{mg} / \mathrm{m} 3$
LD50 Dermal - Rabbit - > 10,000 mg/kg
No data available

## Skin corrosion/irritation

No data available
Serious eye damage/eye irritation
No data available

## Respiratory or skin sensitisation

No data available

## Germ cell mutagenicity

No data available

## Carcinogenicity

No data available
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.
NTP: $\quad$ 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 on OSHA's list of regulated carcinogens.

## Reproductive toxicity

No data available

## Specific target organ toxicity - single exposure

No data available

## Specific target organ toxicity - repeated exposure

No data available

## Aspiration hazard

No data available

## Additional Information

RTECS: VZ4725000
Vomiting, Diarrhoea, Dehydration and congestion may occur in internal organs. Hypertonic salt solutions can produce inflammatory reactions in the gastrointestinal tract., To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated., Nausea

## 12. ECOLOGICAL INFORMATION

### 12.1 Toxicity

Toxicity to fish LC50-Lepomis macrochirus (Bluegill) - 5,840 mg/l -96 h
Toxicity to daphnia and NOEC - Daphnia (water flea) - $1,500 \mathrm{mg} / \mathrm{l}$ - 7 d other aquatic
invertebrates

$$
\text { LC50 - Daphnia magna (Water flea) - 1,661 mg/l - } 48 \mathrm{~h}
$$

### 12.2 Persistence and degradability

### 12.3 Bioaccumulative potential

No data available

### 12.4 Mobility in soil

No data available

### 12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

### 12.6 Other adverse effects

## 13. DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods

## 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

## SARA 302 Components

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

## SARA 313 Components

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

$\left.\begin{array}{lll}\text { Sodium chloride } & \begin{array}{l}\text { CAS-No. }\end{array} & \text { Revision Date } \\ \text { 7647-14-5 }\end{array}\right]$

## 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
Copyright 2016 Sigma-Aldrich Co. LLC. License granted to make unlimited paper copies for internal use only. The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

Preparation Information
Sigma-Aldrich Corporation
Product Safety - Americas Region
1-800-521-8956
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