SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifiers

Product name: Sodium chloride for analysis EMSURE® ACS, ISO, Reag. Ph Eur

Product Number: 1.06404
Catalogue No.: 106404
Brand: Millipore
CAS-No.: 7647-14-5

1.2 Other means of identification

No data available

1.3 Relevant identified uses of the substance or mixture and uses advised against

Identified uses: Reagent for analysis

1.4 Details of the supplier of the safety data sheet

Company: Sigma-Aldrich Pte Ltd
(Reg. No. 199403788W)
1 Science Park Road
#02-14 The Capricorn, S'pore Sci. PkII
SINGAPORE 117528

Telephone: +65 6779-1200
Fax: +65 6779-1822

1.5 Emergency telephone

Emergency Phone #: 1-800-262-8200

SECTION 2: Hazards identification

2.1 GHS Classification

Not a hazardous substance or mixture.

2.2 GHS Label elements, including precautionary statements

Not a hazardous substance or mixture.

2.3 Other hazards - none

SECTION 3: Composition/information on ingredients

Substance / Mixture: Substance

3.1 Substances

Formula: NaCl
Molecular weight: 58.44 g/mol
SECTION 4: First aid measures

4.1 Description of first-aid measures
   
   **If inhaled**
   After inhalation: fresh air.

   **In case of skin contact**
   In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/shower.

   **In case of eye contact**
   After eye contact: rinse out with plenty of water. Remove contact lenses.

   **If swallowed**
   After swallowing: make victim drink water (two glasses at most). Consult doctor if feeling unwell.

4.2 Most important symptoms and effects, both acute and delayed
The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed
No data available

SECTION 5: Firefighting measures

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

   **Unsuitable extinguishing media**
   For this substance/mixture no limitations of extinguishing agents are given.

5.2 Special hazards arising from the substance or mixture
   Hydrogen chloride gas
   Sodium oxides
   Not combustible.
   Ambient fire may liberate hazardous vapours.
   Fire may cause evolution of:
   Hydrogen chloride gas

5.3 Advice for firefighters
   In the event of fire, wear self-contained breathing apparatus.

5.4 Further information
   Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.
SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
Advice for non-emergency personnel: Avoid inhalation of dusts. Evacuate the danger area, observe emergency procedures, consult an expert.
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
Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

6.4 Reference to other sections
For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling
For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities
Storage conditions
Tightly closed. Dry.
Recommended storage temperature see product label.

7.3 Specific end use(s)
Apart from the uses mentioned in section 1.3 no other specific uses are stipulated.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters
Ingredients with workplace control parameters
Contains no substances with occupational exposure limit values.

8.2 Exposure controls
Appropriate engineering controls
Change contaminated clothing. Wash hands after working with substance.

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). Safety glasses

Skin protection
This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).
Full contact
Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 480 min
Material tested: KCL 741 Dermatril® L

This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).

Splash contact
Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 480 min
Material tested: KCL 741 Dermatril® L

**Respiratory protection**
required when dusts are generated.
Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.

**Control of environmental exposure**
Do not let product enter drains.

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**SECTION 9: Physical and chemical properties**

9.1 **Information on basic physical and chemical properties**

| a) Appearance | Form: solid  
|              | Color: colorless  |
| b) Odor      | odorless |
| c) Odor Threshold | Not applicable  |
| d) pH        | 7 |
| e) Melting point/freezing point | Melting point: 801 °C at 1,013.25 hPa  |
| f) Initial boiling point and boiling range | 1,413 °C  |
| g) Flash point | Not applicable |
| h) Evaporation rate | No data available |
| i) Flammability (solid, gas) | The product is not flammable.  |
| j) Upper/lower flammability or explosive limits | No data available |
| k) Vapor pressure | No data available |
| l) Vapor density | No data available |
| m) Relative density | 2.16 at 25 °C |
| n) Water solubility | 317 g/l at 20 °C - completely soluble |
| o) Partition coefficient: | Not applicable for inorganic substances |
n-octanol/water

p) Autoignition temperature

q) Decomposition temperature

r) Viscosity

s) Explosive properties

9.2 Other safety information

Bulk density ca. 1,140 kg/m³
Surface tension 73.03 mN/m at 14.5 g/l at 23 °C

SECTION 10: Stability and reactivity

10.1 Reactivity

No data available

10.2 Chemical stability

The product is chemically stable under standard ambient conditions (room temperature).

10.3 Possibility of hazardous reactions

Risk of explosion/exothermic reaction with:
- Alkali metals
- Exothermic reaction with:
  - Lithium

10.4 Conditions to avoid

No information available

10.5 Incompatible materials

No data available

10.6 Hazardous decomposition products

In the event of fire: see section 5

SECTION 11: Toxicological information

11.1 Information on toxicological effects

**Acute toxicity**

- Oral: No data available
- Inhalation: No data available
- LD50 Dermal - Rabbit - > 10,000 mg/kg
- Remarks: (RTECS)

**Skin corrosion/irritation**

- Skin - Rabbit
- Result: No skin irritation
- Remarks: (ECHA)
**Serious eye damage/eye irritation**
Eyes - Rabbit
Result: No eye irritation
Remarks: (ECHA)

**Respiratory or skin sensitization**
No data available

**Germ cell mutagenicity**
Animal testing did not show any mutagenic effects.
Test Type: Ames test
Test system: Escherichia coli/Salmonella typhimurium
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 471
Result: negative

**Carcinogenicity**
No data available

**Reproductive toxicity**
Did not show teratogenic effects in animal experiments.
No impairment of reproductive performance suspected.

**Specific target organ toxicity - single exposure**
No data available

**Specific target organ toxicity - repeated exposure**
No data available

**Aspiration hazard**
No data available

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

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**SECTION 12: Ecological information**

12.1 Toxicity

**Toxicity to fish**
flow-through test LC50 - Lepomis macrochirus (Bluegill) - 5,840 mg/l - 96 h
Remarks: (ECHA)

**Toxicity to daphnia and other aquatic invertebrates**
static test EC50 - Daphnia magna (Water flea) - 874 mg/l - 48 h
static test LC50 - Daphnia magna (Water flea) - 4,136 mg/l - 48 h
(OECD Test Guideline 202)

**Toxicity to algae**
static test EC50 - Nitzschia sp. - 2,430 mg/l - 120 h
(OECD Test Guideline 201)

12.2 Persistence and degradability
The methods for determining the biological degradability are not applicable to inorganic substances.
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
Discharge into the environment must be avoided.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product
Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself. See www.retrologistik.com for processes regarding the return of chemicals and containers, or contact us there if you have further questions.

SECTION 14: Transport information

14.1 UN number
ADR/RID: - IMDG: - IATA-DGR: -

14.2 UN proper shipping name
ADR/RID: Not dangerous goods
IMDG: Not dangerous goods
IATA-DGR: Not dangerous goods

14.3 Transport hazard class(es)
ADR/RID: - IMDG: - IATA-DGR: -

14.4 Packaging group
ADR/RID: - IMDG: - IATA-DGR: -

14.5 Environmental hazards
ADR/RID: no IMDG Marine pollutant: no IATA-DGR: no

14.6 Special precautions for user

Further information
Not classified as dangerous in the meaning of transport regulations.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Notification status
DSL: All components of this product are on the Canadian DSL
ENCs: On the inventory, or in compliance with the inventory
ISHL: On the inventory, or in compliance with the inventory
The life science business of Merck operates as MilliporeSigma in the US and Canada.

**KECI:** On the inventory, or in compliance with the inventory

**NZIoC:** On the inventory, or in compliance with the inventory

**PICCS:** On the inventory, or in compliance with the inventory

### SECTION 16: Other information

**Further information**

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.

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