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

1.1 Product identifier
Trade name  Sodium chloride

Stock number: 87605
CAS Number: 7647-14-5
EC number: 231-598-3

1.2 Relevant identified uses of the substance or mixture and uses advised against.
Identified use: SU24  Scientific research and development

1.3 Details of the supplier of the safety data sheet
Manufacturer/Supplier: Thermo Fisher (Kandel) GmbH
Zeppelinstr. 7b
76185 Karlsruhe / Germany
Tel: +49 (0) 721 84007 280
Fax: +49 (0) 721 84007 300
Email: tech@alfa.com
www.alfa.com
Informing department: Product safety Tel + +049 (0) 7275 988687-0

1.4 Emergency telephone number:
Carechem 24: +44 (o) 1235 239 670 (Multi-language emergency number)
Poison Information Center Mainz  www.giftinfo.uni-mainz.de  Telephone: +49(0)6131/19240

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture
Classification according to Regulation (EC) No 1272/2008
The substance is not classified as hazardous to health or the environment according to the CLP regulation.
Other hazards that do not result in classification  No information known.

2.2 Label elements
Labelling according to Regulation (EC) No 1272/2008  Not applicable
Hazard pictograms  Not applicable
Signal word  Not applicable
Hazard statements  Not applicable

2.3 Other hazards
Results of PBT and vPvB assessment
PBT: Not applicable.
vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

3.1 Substances
CAS# Designation: 7647-14-5 Sodium chloride
Concentration: ≤ 100%
Identification number(s):
EC number: 231-598-3

SECTION 4: First aid measures

4.1 Description of first aid measures
General information  No special measures required.
After inhalation  Seek medical treatment in case of complaints.
After skin contact  Generally the product does not irritate the skin.
After eye contact  Rinse opened eye for several minutes under running water. If symptoms persist, consult doctor.
After swallowing  In case of persistent symptoms consult doctor.

4.2 Most important symptoms and effects, both acute and delayed  No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed  No further relevant information available.

SECTION 5: Firefighting measures

5.1 Extinguishing media
Suitable extinguishing agents  Product is not flammable. Use fire-fighting measures that suit the surrounding fire.

5.2 Special hazards arising from the substance or mixture
If this product is involved in a fire, the following can be released:
Sodium oxide
Hydrogen chloride (HCl)

5.3 Advice for firefighters
Protective equipment:  No special measures required.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures  Not required.
6.2 Environmental precautions: Do not allow material to be released to the environment without proper governmental permits.
6.3 Methods and material for containment and cleaning up: Collect mechanically.
Prevention of secondary hazards:  No special measures required.
6.4 Reference to other sections
See Section 7 for information on safe handling
See section 8 for information on personal protection equipment.
See Section 13 for information on disposal.

SECTION 7: Handling and storage

7.1 Precautions for safe handling
Handle under dry protective gas.
Keep containers tightly sealed.
Store in cool, dry place in tightly closed containers.
Information about protection against explosions and fires:
The product is not flammable.
No special measures required.

7.2 Conditions for safe storage, including any incompatibilities
Storage
Requirements to be met by storerooms and containers:  No special requirements.
Trade name Sodium chloride

Information about storage in one common storage facility: Store away from water.
Further information about storage conditions:
Store under dry inert gas.
This product is hygroscopic.
Keep container tightly sealed.
Store in cool, dry conditions in well sealed containers.
Protect from humidity and keep away from water.

7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

Additional information about design of technical systems: No further data; see item 7.

8.1 Control parameters
Components with critical values that require monitoring at the workplace:
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
Additional information: No data

8.2 Exposure controls
Personal protective equipment:
General protective and hygienic measures
The usual precautionary measures should be adhered to in handling the chemicals.
Maintain an ergonomically appropriate working environment.
Breathing equipment: Not required.
Recommended filter device for short term use:
Use a respirator with type N95 (USA) or FFP (EN 143) cartridges as a backup to engineering controls. Risk assessment should be performed to determine if air-purifying respirators are appropriate. Only use equipment tested and approved under appropriate government standards.
Protection of hands: Not required.
Material of gloves: Nitrile rubber, NBR
Penetration time of glove material (in minutes) 480
Glove thickness: 0.11 mm
Eye protection: Safety glasses with side shields / NIOSH (US) or EN 166 (EU)
Body protection: Protective work clothing.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties
General Information
Appearance:
Form: Powder/crystalline/beads
Odour: Odourless
Odour threshold: Not determined.

pH-value (50 g/l) at 20 °C: 6-9

Change in condition
Melting point/freezing point: 801 °C
Initial boiling point and boiling range: 1413 °C
Sublimation temperature / start: Not determined
Inflammability (solid, gaseous) Not determined.
Ignition temperature: Not determined
Decomposition temperature: Not determined
Self-inflammability: Not determined.

Explosive properties: Not determined.
Critical values for explosion:
Lower: Not determined
Upper: Not determined
Steam pressure: Not applicable.
Density at 20 °C 2.165 g/cm³
Relative density Not determined.
Vapour density Not applicable.
Evaporation rate Not applicable.
Solubility in / Miscibility with Water at 20 °C: 358 g/l
Partition coefficient: n-octanol/water: Not determined.
Viscosity: dynamic: Not applicable.
kinematic: Not applicable.

9.2 Other information
No further relevant information available.

SECTION 10: Stability and reactivity

10.1 Reactivity No information known.
10.2 Chemical stability Stable under recommended storage conditions.
Thermal decomposition / conditions to be avoided: No decomposition if used and stored according to specifications.
10.3 Possibility of hazardous reactions No dangerous reactions known
10.4 Conditions to avoid No further relevant information available.
10.5 Incompatible materials: Water/moisture
10.6 Hazardous decomposition products:
Sodium oxide
Hydrogen chloride (HCl)

SECTION 11: Toxicological information

11.1 Information on toxicological effects
Acute toxicity The Registry of Toxic Effects of Chemical Substances (RTECS) contains acute toxicity data for this substance.
LD/LC50 values that are relevant for classification:
Oral [LD50] 3000 mg/kg (rat)
Skin irritation or corrosion: May cause irritation
Eye irritation or corrosion: May cause irritation
Respiratory or skin sensitisation: Based on available data, the classification criteria are not met.
Germ cell mutagenicity: The Registry of Toxic Effects of Chemical Substances (RTECS) contains mutation data for this substance.
Carcinogenicity: No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH.
Reproductive toxicity: The Registry of Toxic Effects of Chemical Substances (RTECS) contains reproductive data for this substance.
Specific target organ system toxicity - repeated exposure: No effects known.
Specific target organ system toxicity - single exposure: No effects known.
Aspiration hazard: No effects known.

(Contd. on page 3)
SECTION 12: Ecological information

12.1 Toxicity
Aquatic toxicity: No further relevant information available.

12.2 Persistence and degradability No further relevant information available.

12.3 Bioaccumulative potential: No further relevant information available.

12.4 Mobility in soil No further relevant information available.

Additional ecological information:

General notes:
Do not allow material to be released to the environment without proper governmental permits.
Water hazard class 1 (Assessment by list): slightly hazardous for water.
Do not allow undiluted product or large quantities to reach ground water, water course or sewage system.
Avoid transfer into the environment.

12.5 Results of PBT and vPvB assessment
PBT: Not applicable.
vPvB: Not applicable.

12.6 Other adverse effects No further relevant information available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods
Recommendation
Hand over to disposers of hazardous waste.
Must be specially treated under adherence to official regulations.
Consult state, local or national regulations for proper disposal.

Uncleaned packagings:
Recommendation: Disposal must be made according to official regulations.

SECTION 14: Transport information

UN-Number
ADR, ADN, IMDG, IATA Not applicable

14.2 UN proper shipping name
ADR, ADN, IMDG, IATA Not applicable

14.3 Transport hazard class(es)
ADR, ADN, IMDG, IATA Not applicable

Packaging group
ADR, IMDG, IATA Not applicable

14.5 Environmental hazards:
Not applicable.

14.6 Special precautions for user
Not applicable.

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code
Not applicable.

UN "Model Regulation": Not applicable

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
Australian Inventory of Chemical Substances Substance is listed.
Standard for the Uniform Scheduling of Medicines and Poisons Substance is not listed.

Directive 2012/18/EU
Named dangerous substances - ANNEX I Substance is not listed.

National regulations
Information about limitation of use: For use only by technically qualified individuals.
Classification according to VbF: Not applicable

Water hazard class: Water hazard class 1 (Assessment by list): slightly hazardous for water.

Other regulations, limitations and prohibitive regulations
EINES (European List of Notified Chemical Substances) Substance is not listed.
Substance of Very High Concern (SVHC) according to the REACH Regulations (EC) No. 1907/2006. Substance is not listed.
The conditions of restrictions according to Article 67 and Annex XVII of the REACH Regulations (EC) No 1907/2006 (REACH) for the manufacturing, placing on the market and use must be observed.
Substance is not listed.
Annex XIV of the REACH Regulations (requiring Authorisation for use) Substance is not listed.

15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgement of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.

Department issuing SDS: Global Marketing Department
Abbriviations and acronyms:
RID: Règlement international concernant le transport des marchandises dangereuses par route (Regulations Concerning the International Transport of Dangerous Goods by Road)
RACC: International Civil Aviation Organisation
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS (European List of Notified Chemical Substances) Substance is not listed.
Substance of Very High Concern (SVHC) according to the REACH Regulations (EC) No. 1907/2006. Substance is not listed.
The conditions of restrictions according to Article 67 and Annex XVII of the REACH Regulations (EC) No 1907/2006 (REACH) for the manufacturing, placing on the market and use must be observed.
Substance is not listed.
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15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.