

1 Identification

Product identifier

Product name: Sodium chloride, Puratronic®

Stock number: 10862

CAS Number:

7647-14-5

EC number:

231-598-3

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

Identified use: SU24 Scientific research and development

Details of the supplier of the safety data sheet

Manufacturer/Supplier:

Alfa Aesar

Thermo Fisher Scientific Chemicals, Inc.

30 Bond Street

Ward Hill, MA 01835-8099

Tel: 800-343-0660

Fax: 800-322-4757

Email: tech@alfa.com

www.alfa.com

Information Department: Health, Safety and Environmental Department

Emergency telephone number:

During normal business hours (Monday-Friday, 8am-7pm EST), call (800) 343-0660. After normal business hours, call Carechem 24 at (866) 928-0789.

2 Hazard(s) identification

Classification of the substance or mixture in accordance with 29 CFR 1910 (OSHA HCS)

The substance is not classified as hazardous according to 29 CFR 1910 (OSHA GHS).

Hazards not otherwise classified No information known.

Label elements

GHS label elements Not applicable

Hazard pictograms Not applicable

Signal word Not applicable

Hazard statements Not applicable

WHMIS classification Not controlled

Classification system

HMIS ratings (scale 0-4)

(Hazardous Materials Identification System)

HEALTH 1 Health (acute effects) = 1

FIRE 0 Flammability = 0

REACTIVITY 0 Physical Hazard = 0

Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

3 Composition/information on ingredients

Chemical characterization: Substances

CAS# Description:

7647-14-5 Sodium chloride

Concentration: ≤100%

Identification number(s):

EC number: 231-598-3

4 First-aid measures

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 a doctor.

After swallowing If symptoms persist consult doctor.

Information for doctor

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

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

5 Fire-fighting measures

Extinguishing media

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

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)

Advice for firefighters

Protective equipment: No special measures required.

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures Not required.

Environmental precautions: Do not allow material to be released to the environment without proper governmental permits.

Methods and material for containment and cleaning up: Pick up mechanically.

Prevention of secondary hazards: No special measures required.

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 disposal information.

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Protective Action Criteria for Chemicals

PAC-1: Substance is not listed.

PAC-2: Substance is not listed.

PAC-3: Substance is not listed.

7 Handling and storage

Handling

Precautions for safe handling

Handle under dry protective gas.

Keep container 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.

Conditions for safe storage, including any incompatibilities

Storage

Requirements to be met by storerooms and receptacles: No special requirements.

Information about storage in one common storage facility: Store away from water/moisture.

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 water.

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

8 Exposure controls/personal protection

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

Control parameters

Components with limit 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

Exposure controls

Personal protective equipment

General protective and hygienic measures

The usual precautionary measures for handling chemicals should be followed.

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 PE (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.

9 Physical and chemical properties

Information on basic physical and chemical properties

General Information

Appearance:

Form: Powder/crystalline/beads

Odor: Odorless

Odor threshold: Not determined.

pH-value (50 g/l) at 20 °C (68 °F): 6-9

Change in condition

Melting point/Melting range: 801 °C (1474 °F)

Boiling point/Boiling range: 1413 °C (2575 °F)

Sublimation temperature / start: Not determined

Flammability (solid, gaseous) Not determined.

Ignition temperature: Not determined

Decomposition temperature: Not determined

Auto igniting: Not determined.

Danger of explosion: Not determined.

Explosion limits:

Lower: Not determined

Upper: Not determined

Vapor pressure: Not applicable.

Density at 20 °C (68 °F): 2.165 g/cm³ (18.067 lbs/gal)

Relative density Not determined.

Vapor density Not applicable.

Evaporation rate Not applicable.

Solubility in / Miscibility with

Water at 20 °C (68 °F): 358 g/l

Partition coefficient (n-octanol/water): Not determined.

Viscosity:

dynamic: Not applicable.

kinematic: Not applicable.

Other information No further relevant information available.

10 Stability and reactivity

Reactivity No information known.

Chemical stability Stable under recommended storage conditions.

Thermal decomposition / conditions to be avoided: Decomposition will not occur if used and stored according to specifications.

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USA

Product name: Sodium chloride, Puratronic®	
<div><div>Possibility of hazardous reactions</div><div>No dangerous reactions known</div></div> <div><div>Conditions to avoid</div><div>No further relevant information available.</div></div> <div><div>Incompatible materials:</div><div>Water/moisture</div></div> <div><div>Hazardous decomposition products:</div><div>Sodium oxide</div><div>Hydrogen chloride (HCl)</div></div>	

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11 Toxicological information	
<div><div>Information on toxicological effects</div><div>Acute toxicity: The Registry of Toxic Effects of Chemical Substances (RTECS) contains acute toxicity data for this substance.</div></div>	
<div><div>LD/LC50 values that are relevant for classification:</div><div>Oral LD50 3000 mg/kg (rat)</div></div>	
<div><div>Skin irritation or corrosion:</div><div>No irritant effect.</div></div> <div><div>Eye irritation or corrosion:</div><div>May cause irritation</div></div> <div><div>Sensitization:</div><div>No sensitizing effects known.</div></div> <div><div>Germ cell mutagenicity:</div><div>The Registry of Toxic Effects of Chemical Substances (RTECS) contains mutation data for this substance.</div></div> <div><div>Carcinogenicity:</div><div>No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH.</div></div> <div><div>Reproductive toxicity:</div><div>The Registry of Toxic Effects of Chemical Substances (RTECS) contains reproductive data for this substance.</div></div> <div><div>Specific target organ system toxicity - repeated exposure:</div><div>No effects known.</div></div> <div><div>Specific target organ system toxicity - single exposure:</div><div>No effects known.</div></div> <div><div>Aspiration hazard:</div><div>No effects known.</div></div> <div><div>Subacute to chronic toxicity:</div><div>The Registry of Toxic Effects of Chemical Substances (RTECS) contains multiple dose toxicity data for this substance.</div></div> <div><div>Additional toxicological information:</div><div>To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.</div></div>	

12 Ecological information	
<div><div>Toxicity</div><div>Aquatic toxicity: No further relevant information available.</div></div> <div><div>Persistence and degradability</div><div>No further relevant information available.</div></div> <div><div>Bioaccumulative potential</div><div>No further relevant information available.</div></div> <div><div>Mobility in soil</div><div>No further relevant information available.</div></div> <div><div>Additional ecological information:</div><div>General notes:</div><div>Do not allow material to be released to the environment without proper governmental permits.</div><div>Do not allow undiluted product or large quantities to reach ground water, water course or sewage system.</div><div>Avoid transfer into the environment.</div></div> <div><div>Results of PBT and vPvB assessment</div><div>PBT: Not applicable.</div><div>vPvB: Not applicable.</div></div> <div><div>Other adverse effects</div><div>No further relevant information available.</div></div>	

13 Disposal considerations	
<div><div>Waste treatment methods</div><div>Recommendation</div><div>Consult state, local or national regulations to ensure proper disposal.</div></div> <div><div>Uncleaned packagings:</div><div>Recommendation:</div><div>Disposal must be made according to official regulations.</div></div>	

14 Transport information	
UN-Number DOT, ADN, IMDG, IATA	Not applicable
UN proper shipping name DOT, ADR, ADN, IMDG, IATA	Not applicable
Transport hazard class(es) DOT, ADR, ADN, IMDG, IATA Class	Not applicable
Packing group DOT, ADR, IMDG, IATA	Not applicable
Environmental hazards:	Not applicable.
Special precautions for user	Not applicable.
Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
Transport/Additional information:	
DOT Marine Pollutant (DOT):	No
UN "Model Regulation":	Not applicable

15 Regulatory information	
<div><div>Safety, health and environmental regulations/legislation specific for the substance or mixture</div><div>GHS label elements</div><div>Not applicable</div></div> <div><div>Hazard pictograms</div><div>Not applicable</div></div> <div><div>Signal word</div><div>Not applicable</div></div> <div><div>Hazard statements</div><div>Not applicable</div></div> <div><div>National regulations</div><div>All components of this product are listed in the U.S. Environmental Protection Agency Toxic Substances Control Act Chemical substance Inventory.</div><div>All components of this product are listed on the Canadian Domestic Substances List (DSL).</div><div>SARA Section 313 (specific toxic chemical listings) Substance is not listed.</div><div>California Proposition 65</div><div>Prop 65 - Chemicals known to cause cancer Substance is not listed.</div><div>Prop 65 - Developmental toxicity Substance is not listed.</div><div>Prop 65 - Developmental toxicity, female Substance is not listed.</div><div>Prop 65 - Developmental toxicity, male Substance is not listed.</div><div>Information about limitation of use:</div><div>For use only by technically qualified individuals.</div></div>	

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USA

Product name: Sodium chloride, Puratronic®

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Other regulations, limitations and prohibitive regulations
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 Regulation (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.
Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

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

Date of preparation/Revision: Print date, revision date and version number are in the header of each page.

Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: 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

DOT: US Department of Transportation

IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

HMIS: Hazardous Materials Identification System (USA)

WHMIS: Workplace Hazardous Materials Information System (Canada)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

SVHC: Substances of Very High Concern

vPvB: very Persistent and very Bioaccumulative

ACGIH: American Conference of Governmental Industrial Hygienists (USA)

OSHA: Occupational Safety and Health Administration (USA)

NTP: National Toxicology Program (USA)

IARC: International Agency for Research on Cancer

EPA: Environmental Protection Agency (USA)

USA