

**SAFETY DATA SHEET: SODIUM CHLORIDE**

According to Regulation (EC) No. 1907/2006

**SECTION 1. Identification of the substance/mixture and of the company/undertaking****1.1 Product identifier: SODIUM CHLORIDE**

Product name: Sodium chloride

Synonyms: Halite, common salt, PDV salt, solar salt

Product:

All grades of Solar salt, Pure Dried Vacuum Salt including Pharmaceutical grades (Sodium Chloride)

REACH Registration Number:

A registration number is not available for this substance as the substance or its use are exempted from registration according to Article 2 REACH Regulation (EC) No 1907/2006.

CAS-No. 7647-14-5

HSNO Approval Code HSR002722.

**1.2 Relevant identified uses of the substance or mixture and uses advised against**

Identified uses:

Pharmaceutical production, Cosmetic raw material, Food additive, Water treatment and Industrial salt.

For additional information on uses please refer to the Dominion Salt web site ([www.domsalt.co.nz](http://www.domsalt.co.nz))

Recommended use and restriction on use:

Recommended use: Not available.

Restrictions on use: Not known.

**1.3 Details of the supplier of the safety data sheet**

Manufacturer:

Dominion Salt Limited.

Address:

Head Office & North Island Refinery

89 Totara Street

PO Box 4249, Mount Maunganui South

New Zealand

South Island Refinery

Kaparu Road, Lake Grassmere

PO Box 81, Seddon 7247

New Zealand

Customer Service:

Phone: +64 7 5756193

Fax: +64 7 575 3017

Contact Person:

Email: [sales@domsalt.co.nz](mailto:sales@domsalt.co.nz)

Website: [www.domsalt.co.nz](http://www.domsalt.co.nz)

**1.4 Emergency telephone number:**

Outside New Zealand: +64 3 35 30199

Within New Zealand: 0800 Chemcall (0800 243 62255)

**SAFETY DATA SHEET: SODIUM CHLORIDE****SECTION 2. Hazards identification**

## 2.1 Classification of the substance or mixture

This substance is not classified as dangerous according to European Union legislation.

## 2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

## 2.3 Other hazards

None known.

**SECTION 3. Composition/information on ingredients**

## 3.1 Substance

Formula NaCl ClNa (Hill)

EC-No. 231-598-3

Molar mass 58,44 g/mol

Remarks No disclosure requirement according to Regulation (EC) No. 1907/2006

## 3.2 Mixture

Not applicable

**SECTION 4. First aid measures**

## 4.1 Description of first aid measures

After inhalation: fresh air.

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

After eye contact: rinse out with plenty of water.

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 Nausea, Vomiting

## 4.3 Indication of any immediate medical attention and special treatment needed. No information 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

Not combustible.

Ambient fire may liberate hazardous vapours.

Fire may cause evolution of: Hydrogen chloride gas

## 5.3 Advice for firefighters

Special protective equipment for firefighters:

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

Further information Suppress (knock down) gases/vapours/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

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### 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, and consult an expert.

**Inhalation:** Very high concentrations of salt dust may result in inflammations of the mucus membranes of the respiratory tract.



**Skin Contact:** Dry salt and concentrated solutions can cause withdrawal of fluid from the skin and may, on prolonged contact, produce irritation.

**Eye Contact:** Salt and salt solutions are not toxic to the eye but concentrations much above that of tears cause a stinging sensation.



**Ingestion:** Acute and chronic toxic effects can result from the ingestion of excessive amounts of either salt or brine. Salt should not be used as an emetic to induce vomiting. High concentrations produce inflammatory reactions in the gastrointestinal tract and can cause vomiting, diarrhea, convulsions and collapse. The ingestion of hypertonic solutions can cause fatal disturbance of body electrolyte and fluid balance particularly in the young and elderly. Less than a tablespoon of salt may severely poison an infant and sometimes prove fatal.

**Personal precautions:** Avoid prolonged contact with the skin and inhalation of dust concentrations, otherwise normal good handling and housekeeping practice is adequate. No special protective clothing is required.

An eyewash bottle with clean water should be made available.

**Spillages:** Spillages should be swept up under normal circumstances

**Advice for emergency responders:**

Protective equipment see sections 5 & 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. Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

#### 6.4 Reference to other sections

Indications about waste treatment see section 13.

**SAFETY DATA SHEET: SODIUM CHLORIDE****SECTION 7. Handling and storage**

## 7.1 Precautions for safe handling

Advice on safe handling

Observe label precautions.

Hygiene measures

Change contaminated clothing. Wash hands after working with substance.

## 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 1.2 no other specific uses are stipulated.

**SECTION 8. Exposure controls/personal protection**

## 8.1 Control parameters

## 8.2 Exposure controls

Engineering measures

Technical measures and appropriate working operations should be given priority over the use of personal protective equipment. See section 7.1.

Individual protection measures

PPE needs to be selected specifically for the workplace, depending on concentrations and quantities of the hazardous substances handled. The chemical resistance of the protective equipment should be confirmed with the supplier.

Eye/face protection: Safety glasses

Hand protection full contact:

Glove material Nitrile rubber

Glove thickness 0,11 mm

Break through time &gt; 480 min

Splash contact:

Glove material Nitrile rubber

Glove thickness 0,11 mm

Break through time &gt; 480 min

The Safety Data Sheets for all catalogue items are available at [www.domsalt.co.nz](http://www.domsalt.co.nz)

The protective gloves to be used must comply with the specifications of EC Directive 89/686/EEC and the related standard EN374.

This recommendation applies only to the product stated in the safety data sheet supplied by Dominion Salt 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

Respiratory protection is required when dust has been generated.

Recommended Filter type: Filter P 1 (acc. to DIN 3181) for solid particles of inert substances

Ensure that maintenance, cleaning and testing of all respiratory protective devices is carried out in accordance to the manufactures instructions.

Environmental exposure controls

Do not let the product enter drains.

**SAFETY DATA SHEET: SODIUM CHLORIDE****SECTION 9. Physical and chemical properties**

## 9.1 Information on basic physical and chemical properties

Form	solid
Colour	colourless
Odour	odourless
Odour Threshold	Not applicable
pH	4,5 - 7,0 at 100 g/l 20 °C
Melting point	801 °C
Boiling point/boiling range	1.461 °C at 1.013 hPa
Flash point	Not applicable
Evaporation rate	No information available.
Flammability (solid, gas)	The product is not flammable.
Lower explosion limit	No information available.
Upper explosion limit	No information available.
Vapour pressure	1,3 hPa at 865 °C
Relative vapour density	No information available.
Density	2,17 g/cm <sup>3</sup> at 20 °C
Relative density	No information available.
Water solubility	358 g/l at 20 °C
Partition coefficient: n-octanol/water	No information available.
Auto-ignition temperature	No information available.
Decomposition temperature	No information available.
Viscosity, dynamic	No information available.
Explosive properties	Not classified as explosive.
Oxidizing properties	none

## 9.2 Other data

Ignition temperature	Not applicable
Bulk density	ca. 1.140 kg/m <sup>3</sup>

**SECTION 10. Stability and reactivity**

## 10.1 Reactivity

See section 10.3

## 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 information available

## 10.6 Hazardous decomposition products

In the event of fire: See section 5.

**SAFETY DATA SHEET: SODIUM CHLORIDE****SECTION 11. Toxicological information**

## 11.1 Information on toxicological effects

Acute oral toxicity  
LD50 Rat: 3.000 mg/kg (RTECS)

Acute inhalation toxicity  
This information is not available.

Acute dermal toxicity  
LD50 Rabbit: > 10.000 mg/kg (RTECS)

Skin irritation  
Rabbit (ECHA)  
No skin irritation

Eye irritation  
Rabbit (ECHA)  
No eye irritation

Sensitisation  
This information is not available.

Germ cell mutagenicity  
Genotoxicity in vitro

Mutagenicity (mammal cell test): micronucleus.  
Result: negative (IUCLID)

Ames test  
Result: negative (IUCLID)

Carcinogenicity  
This information is not available.

Reproductive toxicity  
This information is not available.

Teratogenicity  
This information is not available.

Specific target organ toxicity - single exposure  
This information is not available.

Specific target organ toxicity - repeated exposure  
This information is not available.

Aspiration hazard  
This information is not available.

## 11.2 Further information

Systemic effects:  
After swallowing of large amounts:  
Nausea, Vomiting  
No toxic effects are to be expected when the product is handled appropriately.

**SAFETY DATA SHEET: SODIUM CHLORIDE****SECTION 12. Ecological information**

## 12.1 Toxicity

Toxicity to fish

LC50 Pimephales promelas (fathead minnow): 7.650 mg/l; 96 h (IUCLID)

Toxicity to daphnia and other aquatic invertebrates

EC50 Daphnia magna (Water flea): 1.000 mg/l; 48 h (IUCLID)

## 12.2 Persistence and degradability

Biodegradability

The methods for determining the biological degradability are not applicable to inorganic substances.

## 12.3 Bioaccumulative potential

No information available.

## 12.4 Mobility in soil

No information 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

Additional ecological information

Discharge into the environment must be avoided.

**SECTION 13. Disposal considerations**

Waste treatment methods

See [www.domsalt.co.nz](http://www.domsalt.co.nz) for processes regarding the return of empty bulk bags.**SECTION 14. Transport information**

Land transport (ADR/RID) 14.1 - 14.6

Not classified as dangerous in the meaning of transport regulations.

Inland waterway transport (ADN)

Not relevant

Air transport (IATA) 14.1 - 14.6

Not classified as dangerous in the meaning of transport regulations.

Sea transport (IMDG) 14.1 - 14.6

Not classified as dangerous in the meaning of transport regulations.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not relevant

**SAFETY DATA SHEET: SODIUM CHLORIDE****SECTION 15. Regulatory information**

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

EU regulations  
Major Accident Hazard                      96/82/EC  
Legislation                                      Directive 96/82/EC does not apply

Regulation (EC) No 1005/2009 on substances that deplete the ozone layer - not regulated

Regulation (EC) No 850/2004 of the European Parliament and of the Council of 29 April 2004 on persistent organic pollutants and amending Directive 79/117/EEC - not regulated

Regulation (EC) No 689/2008 concerning the export and import of dangerous chemicals - not regulated

Substances of very high concern (SVHC)

This product does not contain substances of very high concern according to Regulation (EC) No 1907/2006 (REACH), Article 57 above the respective regulatory concentration limit of  $\geq 0.1\%$  (w/w).

National legislation:  
Storage class - 10 – 13

Regulatory Status:  
Approved by New Zealand Environmental Protection Authority - HSNO Approval Code HSR002722.

HASNO Classification: 6.1E and 6.4A Toxic & skin and eye irritant.

Safety Phrases:  
S 22 Do not breathe dust.  
S 24/25 Avoid contact with skin and eyes.  
S 26 In case of contact with eyes rinse immediately with plenty of water and seek medical advice.

Risk phrases:  
S 36/37/38 Irritating to eyes, respiratory system and skin.

The product has not been classified as dangerous according to GHS

**SECTION 16. Other information**

Training advice:  
Provide adequate information, instruction, training and supervision for operators.

Labelling (67/548/EEC or 1999/45/EC):  
The product does not need to be labelled in accordance with EC directives or respective national laws.

Key or legend to abbreviations and acronyms used in the safety data sheet:  
Used abbreviations and acronyms can be looked up at [www.wikipedia.org](http://www.wikipedia.org).

Regional representation:  
This information is given on the authorised Safety Data Sheet for your country.



## SAFETY DATA SHEET: SODIUM CHLORIDE

### Handling:

Salt dust is non-flammable but static electricity can be generated by pneumatic conveying, therefore pipes should be bonded and earthed, especially in environments where a spark could prove hazardous.

### Storage:

Due to its hygroscopic nature, salt should be stored in a dry atmosphere and away from concentrated acids. Absorbs moisture if the relative humidity is above 75 %

Product should be stored in such a way that it does not present a hazard if product was to fall

### First Aid Measures

#### Inhalation:

Remove patient to fresh air. Keep warm and at rest. Give water if desired.

#### Ingestion:

Vomiting will probably occur. Provided the patient is conscious give plenty of liquid to drink. Obtain immediate medical attention especially if vomiting has not occurred.

#### Eye Contact:

Irrigate with eyewash solution or water. If symptoms develop obtain medical help.

#### Skin Contact:

Wash with plenty of water.

#### Workplace facilities:

Emergency showers and eye wash recommended

### NOTES FOR MEDICAL PERSONNEL

#### Swallowed:

Give water to drink. No need to induce vomiting.

#### Eye:

Irrigate with copious quantities of slow flowing water for up to 15 minutes. Eyelids to be held open

#### Skin:

Brush off clothing and wash skin thoroughly with plenty of water.

#### Inhaled:

Not normally a risk but some may experience some discomfort if working with dusty product. If exposure has occurred allow the victim to drink water.

### Workplace Exposure Guidelines

Occupational Exposure: As total dust 10mg/m<sup>3</sup> (8hr TWA)

Limits: As respirable dust 4mg/m<sup>3</sup> (8hr TWA)

#### Dangerous Exposure:

Non specified.

NOTE: The information contained herein is based on the present state of our knowledge. It characterises the product with regard to the appropriate safety precautions. It does not represent a guarantee of any properties of the product.