

SAFETY DATA SHEET: SALT (Sodium Chloride)

Version: P**Revision date: 11/10/2024**

Section 1: Identification of Substances and Supplier

Product name: Sodium Chloride - All grades of Solar Salt, Pure Dried Vacuum Salt including Pharmaceutical grades

Synonyms: Halite, Table salt, Common salt, PDV salt, Solar salt

Recommended use: Various as per product specification

**Manufacturer/
Supplier information:** As above

Telephone number: +64 7 575 6193 Head Office Mount Maunganui (New Zealand)

Emergency telephone Number: Outside New Zealand: +64 3 35 30199
Within New Zealand: 0800 CHEMCALL ☐ (0800 243 62255)

Section 2: Hazards identification

HSNO Approval Code: Does not have an individual approval but may be used under an appropriate group standard

HSNO Classification: H319: causes serious eye irritation, Classification eye Irrit.2

GHS Classification: Not classified as hazardous under GHS criteria

GHS Label Elements: No hazard pictogram, no signal word, no hazards statement

Precautionary statements: No precautionary statements required

Hazards Statements: Non-hazardous material under normal handling and storage conditions.

Section 3: Classification of Substance

Chemical Name: Sodium Chloride

Chemical Formula: NaCl

CAS Number: 7647-14-5

EC Number: 231-598-3

Section 4: First Aid Measures

Inhalation:	If inhaled, remove person to fresh air. If symptoms persist, seek medical attention.
Ingestion:	Rinse mouth. If large amounts are ingested, obtain immediate medical attention (especially if vomiting has not occurred).
Eye Contact:	Rinse immediately with plenty of water, also under the eyelids, for at least 20 minutes. If irritation occurs, seek medical attention.
Skin Contact:	Wash with plenty of water. If irritation persists, seek medical attention.
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 minimum of 20 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

Section 5: Firefighting measures

Extinguishing media:	Use extinguishing measures that are suitable for the surrounding fire and the environment No limitations of extinguishing are given for this substance Sodium chloride is not flammable and does not support combustion.
Special hazards arising from the substance or mixture:	Hydrogen chloride gas, Sodium oxides, ambient fire may liberate hazardous vapours
Advise for fire fighters:	Wear self-contained breathing apparatus and protective clothing if necessary

Section 6: Accidental release measures

Personal Precautions:	Ensure adequate ventilation. Avoid contact with eyes and skin.
Environmental Precautions:	Avoid uncontrolled releases in the environment.
Methods for clean up:	Cover drains. Sweep or vacuum up material and place in a suitable container for disposal. Avoid generating dust.

Section 7: Handling and Storage

Storage conditions:	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 were to fall
Handling:	Handle in accordance with safety practices. 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.

Section 8: Exposure Controls/ Personal Protection

Subsection 1: Workplace Exposure Guidelines

Occupational Exposure:	As total dust 10mg/m ³ (8hr TWA)
Limits:	As respirable dust 4mg/m ³ (8hr TWA)
Dangerous Exposure:	Non specified.
Engineering Controls:	Static electricity can be generated by pneumatic conveying, therefore pipes should be bonded and earthed, especially in environments where a spark could prove hazardous

Subsection 2: Engineering Controls

Respiratory Protection:	If the process is such that salt dust is generated, an approved respirator should be worn.
Hand Protection:	Gloves to be worn if prolonged contact is anticipated. Dry salt and concentrated solutions can cause withdrawal of fluid from the skin.
Eye Protection:	Wear chemical safety goggles in situations where contact with the eyes may occur.
Skin Protection:	Skin should be washed to remove salt. Dry salt and concentrated solutions can cause withdrawal of fluid from the skin.
Other Protective Measures:	An eyewash and hand washing facilities should be readily available.

Section 9: Physical and Chemical Properties

Appearance:	White/colourless crystalline solid
Odour:	Odourless
Melting Point:	802°C
Boiling Point:	1413°C
Flammability:	Non-flammable
Flash Point:	Non-flammable
Explosive Properties:	Non-flammable
Oxidising Properties:	Non-flammable
Vapour Pressure:	2.4mm Hg at 747°C
Density:	2.165 g/cm ³ (of crystalline solid at 20°C)
Water solubility:	35.9 g/100g at 0°C, 39.2 g/100g at 100°C
Viscosity & Vapour Density:	Not applicable
Molecular weight:	58.44

Section 10: Stability and Reactivity

Chemical Stability:	Stable
Conditions to avoid:	Reacts with strong sulphuric acid or nitric acid to give hydrogen chloride gas
Material to avoid:	Under wet conditions can corrode many common metals, particularly iron, aluminum and zinc. Stainless steel and monel resist attack.
Hazard Decomposition:	Trace amounts of hydrogen chloride gas may be evolved at in excess of 800°C. Contains no water of crystallization. Does not react with alkalis at ordinary temperatures

Section 11: Toxicological Information

Eyes:	Dust may be irritating
Skin:	Irritation after prolonged contact
Ingestion:	Salt is an essential constituent of the diet. It provides important body electrolytes and is the source of hydrochloric acid present in the gastric juices. The blood stream contains nearly 1% sodium chloride. In normal industrial use salt is non- hazardous. LD50 3000mg/kg oral, rat.
Inhalation:	Dusts may be irritating
Carcinogenicity:	Not considered to be a carcinogen
Mutagenity:	Not considered to be a mutagen
Reproductive Effects:	Not identified

Section 12: Ecological Information

A maximum value of 412 mg/l ensures the protection of all aquatic life.
Source: Water Research Centre – September 1990

96 hour LC 50 (Fish) 6750 mg/l
48 hour EC 50 (Daphnia) 2024 mg/l
72 hour IC 50
(Algae) 3014 mg/l
Daphnia Sub acute
1062 mg/l Fish
Subacute 433 mg/l
BOD 5 day 0 mg/l
COD 0 mg/l
Earthworm Toxicity 1000 hg/cm2

Section 13: Disposal Considerations

Spills: Collect solid salt in a conventional manner, wash the spill area down with water if necessary.

Disposal methods: Refer to the Local council bylaws and Land Waste Management Authority. Dissolved material in excess water is normally suitable for disposal in storm water system.

Section 14: Transport Information

Material is not included in the requirements for “Transport of Dangerous Goods on Land”

UN Number: Not regulated
Transport Hazards Class: Not classified as hazardous for transport

Section 15: Regulatory Information

HSNO Classification: Not classified as hazardous
HSNO Approval Code: Exempt from HSNO approval
GHS Label Elements: Not applicable. Non-hazardous substance

Section 16: Other Information

Disclaimer:

The information provided in this SDS is accurate to the best of our current knowledge of the chemical substance at the date of issue. It does not represent any guarantee of the properties of the product. Dominion Salt shall not be held liable for any damage resulting from handling or from contact with above product and the user assumes all responsibility for handling and use according to laws and regulations.

This document has been prepared in compliance with New Zealand’s HSNO regulations and the Globally Harmonized System (GHS) of Classification and Labelling of Chemicals.