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**SAFETY DATA SHEET: SALT****Section 1: Identification of the Substance**

<b>Product name:</b>	All grades of Solar salt, Pure Dried Vacuum Salt including Pharmaceutical grades (Sodium Chloride)
<b>Recommended use:</b>	Various
<b>Company details:</b>	Details as above
<b>Address:</b>	Details as above
<b>Telephone Number:</b>	+64 7 575 6193 Head office Mount Maunganui New Zealand
<b>Emergency telephone Number:</b>	Outside New Zealand: +64 3 35 30199 Within New Zealand: 0800 Chemcall ® (0800 243 62255)
<b>Date of preparation:</b>	13 July 2015

**Section 2: Hazards Identification**

**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.

**Section 3: Classification and type**

**Chemical Name :** Sodium Chloride  
**Synonyms:** Halite, common salt, PDV salt, solar salt  
**Chemical Formula:** NaCl  
**CAS Number:** 7647-14-5  
**HASNO Classification:** 6.1E and 6.4A Toxic & skin and eye irritant.

The product has not been classified as dangerous according to GHS

**Section 4: First Aid Measures**

**Inhalation :** Remove patient to fresh air. Keep warm and at rest. Give drinks 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.

**Section 6: Accidental Release Measures**

**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 available.

**Spillages :** Spillages should be swept up or may be safely water hosed to drain under normal circumstances

## Section 7: Handling and Storage

<b>Handling :</b>	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.
<b>Storage :</b>	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

## Section 8: Exposure Controls/Personal Protection

### Subsection 1: Workplace Exposure Guidelines

<b>Occupational Exposure :</b>	As total dust 10mg/m <sup>3</sup> (8hr TWA)
<b>Limits :</b>	As respirable dust 4mg/m <sup>3</sup> (8hr TWA)
<b>Dangerous Exposure :</b>	Non specified.
<b>Engineering Controls :</b>	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

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

### Section 9: Physical and Chemical Properties

<b>Appearance :</b>	Crystalline solid
<b>Colour :</b>	White / Colourless
<b>Boiling Point :</b>	1413°C
<b>Melting Point :</b>	802°C
<b>Flammability :</b>	Non-flammable
<b>Flash Point :</b>	Non-flammable
<b>Explosive Properties :</b>	Non-flammable
<b>Oxidising Properties :</b>	Non-flammable
<b>Vapour Pressure :</b>	2.4mm Hg at 747°C
<b>Density :</b>	2.165 gm / cc (of crystalline solid at 20°C)
<b>Water Solubility :</b>	35.9 g/100g at 0°C 39.2 g/100g at 100°C
<b>Viscosity :</b>	Not applicable
<b>Vapour Density :</b>	Not applicable

### Section 10: Stability and Reactivity

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

### Section 11: Toxicological Information

<b>Eyes :</b>	Dust may be irritating
<b>Skin :</b>	Irritation after prolonged contact
<b>Ingestion :</b>	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.
<b>Inhalation :</b>	Dusts may be irritating.
<b>Carcinogenicity :</b>	Not considered to be a carcinogen.
<b>Mutagenicity :</b>	Not considered to be a mutagen.
<b>Reproductive Effects :</b>	Non 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/cm<sup>2</sup>

**Section 13: Disposal Considerations**

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

**Disposal :** 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"

**EEC Classification:** Under The Chemicals (Hazard Information and Packaging for Supply) Regulations 2002, this material is not dangerous for supply or conveyance.

**Section 15: Regulatory Information****Regulatory Status:**

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

**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.

**Section 16: Other Information**

**Storage :** Being hygroscopic, salt must be stored correctly to prevent and change in physical condition. Dried salt should be stored in a dry atmosphere and unrefined solar salt in a medium dry atmosphere.