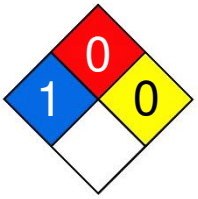
Material Safety Data Sheets



Revision 2

1. IDENTIFICATION

Product Name	**Sodium Chloride Extra pure**
Other Names	Common Salt; Halite; Pure Dried Vacuum (Pdv) Salt; Rock Salt; Salt; Sea Salt; SODIUM CHLORIDE (NaCl); Solar Salt; Swimming Pool Salt
Code No	200-SC-1
Uses	Various
Chemical Family	No Data Available
Chemical Formula	NaCl
Chemical Name	Sodium Chloride
Product Description	No Data Available
Company	Arman sina.co
Contact Information	info@armansina.com www.armansina.com

2. HAZARD IDENTIFICATION

Hazard Categories	Not hazardous
Risk Phrases	Irritating to respiratory system and skin.

Symbol

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients

Chemical Entity	Formula	CAS Number	Proportion
Sodium Chloride	NaCl	7647-14-5	100.0 %

4. FIRST AID MEASURES

Description of necessary measures according to routes of exposure

Swallowed	Rinse mouth with water. Give water to drink provided person is conscious. Never give anything by mouth to an unconscious person. Do NOT induce vomiting (vomiting is likely to occur). Obtain immediate medical attention, especially if vomiting has not occurred.
Eye	Immediately flush eyes with plenty of water for 15 minutes, holding eyelids open. In all cases of eye contamination, it is a sensible precaution to seek medical advice.
Skin	Remove contaminated clothing. Wash affected area with plenty of water. If irritation persists, seek medical attention.
Inhaled	Remove victim from exposure to fresh air. If not breathing, apply artificial respiration. If breathing is difficult, give oxygen. Seek medical attention if effects persist.
Advice to Doctor	Treat symptomatically based on judgement of doctor and individual reactions of patient. 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.
Medical Conditions Aggravated by Exposure	May aggravate pre-existing dry skin conditions such as dermatitis.

5. FIRE FIGHTING MEASURES

General Measures	Clear fire area of all non-emergency personnel. Stay upwind. Keep out of low areas. Eliminate ignition sources. Move fire exposed containers from fire area if it can be done without risk.
Flammability Conditions	Salt in non-flammable but static electricity can be generated by pneumatic conveying.
Extinguishing Media	In case of fire, use appropriate extinguishing media most suitable for surrounding fire conditions (dry chemical, carbon dioxide, water spray or foam).
Fire and Explosion Hazard	Product is a non-flammable solid.
Hazardous Products of Combustion	Salt withstands temperatures up to its meting point and beyond without decomposing, but at very high temperatures (greater than approximately 800 deg C) a vapour may be emitted which is particularly irritating to the eyes. Contains no water of crystallization. Does not react with alkalis at ordinary temperatures
Special Fire Fighting Instructions	Do NOT allow fire fighting water to reach waterways, drains or sewers. Store fire fighting water for treatment.
Personal Protective Equipment	Fire fighters should wear a positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots and gloves).
Flash Point	No Data Available
Lower Explosion Limit	No Data Available
Upper Explosion Limit	No Data Available
Auto Ignition Temperature	No Data Available
Hazchem Code	No Data Available

6. ACCIDENTAL RELEASE MEASURES

General Response Procedure	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. Avoid generating dust. Stop leak if safe to do so. Isolate the danger area. Use clean, non-sparking tools and equipment.
Clean Up Procedures	Contain and sweep/shovel up spills with dust binding material or use an industrial vacuum cleaner. Transfer to a suitable, labelled container and dispose of promptly. Spillages should be swept up or may be safely water hosed to drain under normal circumstances.
Containment	Stop leak if safe to do so. Isolate the danger area.
Environmental Precautionary Measures	Do NOT let product reach drains or waterways. If product does enter a waterway, advise the Environmental Protection Authority or your local Waste Management.
Evacuation Criteria	Evacuate all unnecessary personnel.

7. HANDLING AND STORAGE

Handling	Ensure an eye bath and safety shower are available and ready for use. Observe good personal hygiene practices and recommended procedures. Wash thoroughly after handling. Take precautionary measures against static discharges by bonding and grounding equipment. Avoid contact with eyes, skin and clothing. Do not inhale product dust/fumes. 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	Store in a cool, dry, well-ventilated area. Keep containers tightly closed when not in use. Inspect regularly for deficiencies such as damage or leaks. Protect against physical damage. Store away from incompatible materials as listed in section 10. Due to its hydroscopic 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. This product is not classified dangerous for transport according to The Australian Code for the Transport of Dangerous Goods By Road and Rail.
Container	Store in original packaging as approved by manufacturer.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

General	No exposure standard has been established for this product by the Australian Safety and Compensation Council (ASCC). However, the exposure standard for dust not otherwise specified is 10mg/m3 (for inspirable dust) and 3mg/m3 (for respirable dust). NOTE: The exposure value at the TWA is the average airborne concentration of a particular substance when calculated over a normal 8 hour working day for a 5 day working week. These exposure standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept to as low a level as is workable. These exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.
Exposure Limits	No Data Available
Biological Limits	No information available on biological limit values for this product.
Engineering Measures	A system of local and/or general exhaust is recommended to keep employee exposures as low as possible. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Static electricity can be generated by pneumatic conveying, therefore pipes should be bonded and earthed, especially in environments where a spark could prove hazardous.
Personal Protection Equipment	RESPIRATOR: If the process is such that salt dust is generated, a disposable face mask should be worn (AS1715/1716). EYES: Wear chemical safety goggles in situations where contact with the eyes may occur (AS1336/1337). HANDS: Gloves to be worn if prolonged contact is anticipated. Dry salt and concentrated solutions can cause withdrawal of fluid from the skin (AS2161). CLOTHING: Long-sleeved protective clothing and safety footwear (AS3765/2210).
Work Hygienic Practices	Skin should be washed to remove salt. Dry salt and concentrated solutions can cause withdrawal of fluid from the skin. An eyewash and hand washing facilities should be readily available.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Solid
Appearance	Crystalline Solid
Odour	No Data Available
Colour	White / Colourless
pH	No Data Available
Vapour Pressure	1.3 hpa
Relative Vapour Density	No Data Available
Boiling Point	1461ºC
Melting Point	801ºC
Freezing Point	No Data Available
Solubility	No Data Available
Specific Gravity	No Data Available

Flash Point	**No Data Available**
Auto Ignition Temp	**No Data Available**
Evaporation Rate	**No Data Available**
Bulk Density	**No Data Available**
Corrosion Rate	**No Data Available**
Decomposition Temperature	**No Data Available**
Density	**2.165 g/cc (of crystalline solid at 20 deg C)**
Specific Heat	**No Data Available**
Molecular Weight	**No Data Available**
Net Propellant Weight	**No Data Available**
Octanol Water Coefficient	**No Data Available**
Particle Size	**No Data Available**
Partition Coefficient	**No Data Available**
Saturated Vapour Concentration	**No Data Available**
Vapour Temperature	**No Data Available**
Viscosity	**No Data Available**
Volatile Percent	**No Data Available**
VOC Volume	**No Data Available**
Additional Characteristics	**No Data Available**
Potential for Dust Explosion	**No dust explosion hazard.**
Fast or Intensely Burning Characteristics	**No Data Available**
Flame Propagation or Burning Rate of Solid Materials	**No Data Available**
Non-Flammables That Could Contribute Unusual Hazards to a Fire	**No Data Available**
Properties That May Initiate or Contribute to Fire Intensity	**No Data Available**
Reactions That Release Gases or Vapours	**No Data Available**
Release of Invisible Flammable Vapours and Gases	**No Data Available**

10. STABILITY AND REACTIVITY

General Information	**Reacts with strong sulphuric acid or nitric acid to give hydrogen chloride gas.**
Chemical Stability	**Product is stable under normal conditions of use, storage and temperature.**
Conditions to Avoid	**Reacts with strong sulphuric acid or nitric acid to give hydrogen chloride gas.**
Materials to Avoid	**Under wet conditions can corrode many common metals, particularly iron, aluminum and zinc. Stainless steel and monel resist attack.**
Hazardous Decomposition Products	**Reacts with strong sulphuric acid or nitric acid to give hydrogen chloride gas. Trace amounts of hydrogen chloride gas may be evolved at temperatures in excess of 800 deg C. Contains no water of crystallization. Does not react with alkalis at ordinary temperatures.**
Hazardous Polymerisation	**Hazardous Polymerisation has not been reported.**

11. TOXICOLOGICAL INFORMATION

General Information	**Oral LD50 Rat: 3000 mg/Kg**
Eyelrritant	**Dust may be irritating. Salt and salt solutions are not toxic to the eye but concentrations much above that of tears cause a stinging sensation.**
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. 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, diarrhoea, 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.**

Inhalation	Very high concentrations of salt dust may result in inflammations of the mucus membranes of the respiratory tract.
SkinIrritant	Irritation after prolonged contact. Dry salt and concentrated solutions can cause withdrawal of fluid from the skin and may, on prolonged contact, produce irritation.
Carcinogen Category	No Data Available

12. ECOLOGICAL INFORMATION

Ecotoxicity	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
Persistence/Degradability	No Data Available
Mobility	No Data Available
Environmental Fate	No Data Available
Bioaccumulation Potential	No Data Available
Environmental Impact	No Data Available

13. DISPOSAL CONSIDERATIONS

General Information	Dispose of in accordance with all local regulations. All empty packaging should be disposed of in accordance with Local Regulations or recycled/reconditioned at an approved facility.
Special Precautions for Land Fill	Contact a specialist disposal company or the local waste regulator for advice. Collect solid salt in a conventional manner, wash the spill area down with water if necessary.

14. TRANSPORT INFORMATION

Land Transport

Proper Shipping Name	SODIUM CHLORIDE (SALT)
Class	No Data Available
Subsidiary Risk(s)	No Data Available
	No Data Available
UN Number	No Data Available
Hazchem	No Data Available
Pack Group	No Data Available
Special Provision	No Data Available

Sea Transport
IMDG

Proper Shipping Name	SODIUM CHLORIDE (SALT)
Class	No Data Available
Subsidiary Risk(s)	No Data Available
UN Number	No Data Available
Hazchem	No Data Available
Pack Group	No Data Available
Special Provision	No Data Available
EMS	No Data Available
Marine Pollutant	No

Air Transport
IATA

Proper Shipping Name	**SODIUM CHLORIDE (SALT)**
Class	**No Data Available**
Subsidiary Risk(s)	**No Data Available**
UN Number	**No Data Available**
Hazchem	**No Data Available**
Pack Group	**No Data Available**
Special Provision	**No Data Available**

15. OTHER INFORMATION

Revision	**2**
Key/Legend	**< Less Than** **> Greater Than** **atm Atmosphere** **CAS Chemical Abstracts Service (Registry Number)** **cm Square Centimetres** **CO2 Carbon Dioxide** **COD Chemical Oxygen Demand** **Degrees Celsius** **EPA (New Zealand) Environmental Protection Authority of New Zealand** **Degrees Fahrenheit** **g Grams** **g/cm Grams per Cubic Centimetre** **g/l Grams per Litre** **HSNO Hazardous Substance and New Organism** **IDLH Immediately Dangerous to Life and Health** **immiscible Liquids are insoluable in each other.** **inHg Inch of Mercury** **inH2O Inch of Water** **K Kelvin** **kg Kilogram** **kg/m Kilograms per Cubic Metre** **lb Pound** **LC50 LC stands for lethal concentration. LC50 is the concentration of a material in air which causes the death of 50% (one half) of a group of test animals. The material is inhaled over a set period of time, usually 1 or 4 hours.** **LD50 LD stands for Lethal Dose. LD50 is the amount of a material, given all at once, which causes the death of 50% (one half) of a group of test animals.** **ltr or L Litre** **m Cubic Metre** **mbar Millibar** **mg Milligram** **mg/24H Milligrams per 24 Hours** **mg/kg Milligrams per Kilogram** **mg/m Milligrams per Cubic Metre** **Misc or Miscible Liquids form one homogeneous liquid phase regardless of the amount of either component present.** **mm Millimetre** **mmH2O Millimetres of Water** **mPa.s Millipascals per Second** **N/A Not Applicable** **NIOSH National Institute for Occupational Safety and Health** **NOHSC National Occupational Heath and Safety Commission** **OECD Organisation for Economic Co-operation and Development** **Oz Ounce** **PEL Permissible Exposure Limit** **Pa Pascal** **ppb Parts per Billion** **ppm Parts per Million** **ppm/2h Parts per Million per 2 Hours** **ppm/6h Parts per Million per 6 Hours** **psi Pounds per Square Inch** **R Rankine** **RCP Reciprocal Calculation Procedure** **STEL Short Term Exposure Limit** **TLV Threshold Limit Value** **tne Tonne** **TWA Time Weighted Average** **ug/24H Micrograms per 24 Hours** **UN United Nations** **wt Weight**