Material Safety Data Sheet

1. Identification of Substance

Product Name:	Granular Salt
Chemical name:	Sodium Chloride
CAS No:	7647/14/5
EINECS No:	231-598-3
Formula:	NaCl

2. Identification of company

Darlingtons Group Limited
Bankfields Drive, Eastham,
South Wirral CH62 0AZ
Tel: 0151 328 5600
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3. Composition

Granular salt
Sodium Chloride 99.8%

4. Physical and chemical properties

Physical State	White granular crystals, odourless
Boiling Point	1413°C
Melting Point	801°C
Density	0.9 - 1.1gm/ml
Water Solubility	at 200oC 360 g/l

5. 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, diarrhoea, convulsions and collapse. The ingestion of hypertonic solutions can cause fatal of body electrolyte and fluid balance particularly in the young and the elderly. Less than a tablespoon of salt may severely poison an infant and sometimes prove fatal.

6. First aid measures

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

Ingestion Vomiting will probably occur. Provided that 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.

7. Fire fighting measures

Flammability	Non-flammable
Extinguishing Agents	Use agents suitable for type of surrounding fire (dry chemical, CO2, water, spray or foam).
Special hazards	Salt withstands temperatures up to its melting point without decomposing, but at very high temperatures (greater than approximately 800°C) a vapour may be emitted which is particularly irritating to the eyes.
Protective equipment	As applicable to the combustion products associated with the fire.

8. 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 made available.
Spillages	Spillages should be swept up or may be safely water hosed to drain under normal circumstances.

9. Handling & Storage

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. It will absorb moisture if the relative humidity is above 75%.

10. Exposure controls

Occupational exposure limits	As total dust 10mg/m3 (8hr TWA) As respirable dust 5mg/m3 (8hr TWA)
Dangerous exposure	None 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.

11. Personal protection

Respiratory protection	If the process is such that salt dust is generated, a disposable facemask should be worn.
Hand protection	Gloves should 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.

12. 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 salt can corrode many common metals, particularly iron, aluminium and zinc.
Hazard decomposition products	Trace amounts of hydrogen chloride gas may be evolved at temperatures in excess of 800°C. Contains no water of crystallisation. Does not react with alkalis at ordinary temperatures.

13. 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.
Mutagen city	Not considered to be a mutagen.
Reproductive effects	None identified.

14. Disposal considerations

Disposal should be in accordance with local or national regulations.

15. Transport information

Material not included in the list of substances dangerous for supply. Material not included in the list of substances dangerous for conveyance by road.

16. Regulatory information

User: not classified as hazardous to users.

17. EEC Classification

Under the classification, packaging and labelling of dangerous substances regulations, 1984, this material is not dangerous for supply or conveyance