

# Sodium Chloride- (Brown) Rock Salt

## Material Safety Data Sheet

### 1. CHEMICAL PRODUCT AND COMPANY INFORMATION

**Chemical Product Name** Sodium Chloride (Rock Salt)

**Chemical Family** Halide

**Chemical Name** Sodium Chloride (NaCl)

**Commercial Use:** De-icing salt

### 2. HAZARDS IDENTIFICATION

#### EMERGENCY OVERVIEW

None for Salt – GRAS Substance (Generally Recognized As Safe)

Flammability: 0, Reactivity: 0, Protective Clothing: 0

Potential Health Effects

**Route(s) Of Entry:** Ingestion, skin/eye contact, inhalation.

#### Human Effects and Symptoms of Overexposure

**Acute Inhalation:** Irritation of the respiratory tract.

**Acute Skin Contact:** Large amounts can cause irritation, and, if applied to damaged skin, absorption can occur with effects similar to those of ingestion.

**Acute Eye Contact:** Irritation with burning and tearing (salt concentrations greater than the normal saline present).

**Acute Ingestion:** Intake of large amounts has generally occurred for deliberate reasons: suicide, absorption, and to induce vomiting. The following effects were observed; nausea and vomiting, diarrhoea, cramps, restlessness, irritability, dehydration, water retention, nose bleed, gastrointestinal tract damage, fever, sweating, high blood pressure. Death is generally due to cardiovascular collapse or CNS damage. Less than a few grams would not be harmful. For larger quantities drink large amounts of water or milk.

**Carcinogenicity:** Not listed as carcinogen or mutagen.

**Medical Conditions Aggravated by Exposure:** In some cases of confirmed hypertension, ingestion may result in elevated blood pressure.

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

#### Description

Brown crystalline solids

Contains (typically) 91.0% NaCl, composition by weight is 36% sodium and 55% chlorine.

2.5% Soluble Sulphates, expressed as CaSo<sub>4</sub>

6.5% Insoluble Clay/Marl, which gives the characteristic brown colour.

Sodium Hexacyanoferrate (E number - E535) is added at 80 ppm as an anticaking ingredient

### 4. FIRST AID MEASURES

**First Aid for Eyes:** Flush with water immediately.

**First Aid for Skin:** Remove clothing from affected area. Wash skin thoroughly.

## Sodium Chloride- (Brown) Rock Salt

**First Aid for Inhalation:** Remove patient to fresh air at once. Keep patient warm and give drinks if desired.

### 5. FIRE FIGHTING MEASURES

**Flash Point:** N/A

**Extinguishing Media:** N/A. This product is non-flammable.

**Special Firefighting Procedures:** At very high temperatures a vapour is emitted which is particularly irritating to the eyes.

### 6. ACCIDENTIAL RELEASE MEASURES

**Spill or Leak Procedures:** Contain spills to prevent contamination of water supply. Vacuum or sweep into containers for proper disposal.

### 7. HANDLING AND STORAGE

**Storage Temperature (min./max.):** Avoid humid or wet conditions as product will cake and become hard.

**Special Sensitivity:** Avoid contact with strong acids.

### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Eye Protection Requirements:** Eye glasses or goggles should be worn in dusty areas. □ Page 3

**Skin Protection Requirements:** Protective Clothing may be worn in dusty areas but is generally not required.

**Exposure Limits:** Not Listed

**Respiratory / Ventilation Requirements:** Approved respirator for particulates.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

**Physical Form:** Brown crystalline solid with slight halogen odor.

**Colour:** Brown to opaque

**Odour:** Halogen odour when heated.

**Boiling Point:** 1465 degrees centigrade

**pH:** 6.7 – 10.00

**Solubility in Water:** 26.4%

**Specific Gravity:** (H<sub>2</sub>O=1) 2.16

**Bulk Density:** 1.3 tonnes per cubic metre

### 10. STABILITY AND REACTIVITY

**Stability:** Stable

**Incompatibilities:** Avoid contact with strong acids. Becomes corrosive to metals when wet.

**Decomposition Products:** May evolve chlorine gas when in contact with strong acids.

## Sodium Chloride- (Brown) Rock Salt

### 11. TOXICOLOGICAL INFORMATION

**Description:** Not Listed.

### 12. ECOLOGICAL INFORMATION

**Ecotoxicity:** Not Listed.

**Environmental Degradation:** Not listed.

### 13. DISPOSAL CONSIDERATIONS

**Waste Disposal Method:** Follow applicable Government and local regulations.

### 14. TRANSPORT INFORMATION Page 4

**D.O.T. Shipping Name:** Not listed

**Technical Shipping Name:** Not listed

**D.O.T. Hazard Class:** Not listed

**U.N./ N.A. Number:** Not listed

**D.O.T. Label:** Not listed

**D.O.T. Placard:** N/A

**Freight Class Bulk:** N/A

**Freight Class Package:** N/A

**Product Label:** N/A

### 15. REGULATORY INFORMATION

Product not listed or listed as non hazardous.

Disclaimer. All statements, technical information and recommendations contained herein are, to the best of our knowledge, reliable and accurate. However no warranty, either expressed or implied is made with respect thereto, nor will any liability be assumed for the use of the material described.

It is the responsibility of the user to comply with all applicable Government and Local laws and regulations. It is also the responsibility of the user to maintain a safe workplace. The user should consider the health hazards and safety information provided herein as a guide and should take the necessary steps to instruct employees, and to develop work practice procedures to ensure a safe working environment.

Registered address as above. Registered No. N.I. 6389 The Composition by weight is about 36% Sodium and 55% Chloride.

It is treated with a harmless Anti-Caking additive at 80PPM.

The product is water soluble and absorbs from damp atmospheres.

It reacts with strong Sulphuric Acid or Nitric Acid to give Hydrogen Chloride Gas.

Under wet conditions it can corrode many common metals

## Sodium Chloride- (Brown) Rock Salt

### Health Hazard Data

Skin - Essentially non irritating

Eyes - Salt and salt solutions are non toxic to the eye but concentrations above that of tears may cause a stinging sensation.

Inhalation – Very high concentrations of salt dust may result in inflammation of the mucus membrane of the respiratory tract.

### Safety Precautions

Avoid prolonged contact with the skin and inhalation of high 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.

Rock salt can be stored in the open if desired, away from valued vegetation as high concentrations of salt can damage plant life.

Spillages should be swept up or maybe safely water hosed to drain in normal circumstances.

### First Aid Treatment

Skin – Wash affected area with plenty of water.

Eyes – Irrigate with clean fresh water.

Inhalation – Remove patient from source of exposure to fresh air, keep patient warm and give drinks if desired.

### Fire and Explosion Hazards

Non – Hazardous

Salt withstands up to its melting point and beyond without decomposing, but at very high temperatures a vapour is emitted which is particularly irritating to the eyes.

**Important Note:** The information contained in this document is given in good faith and is to the best of suppliers Knowledge correct at the date of publication, but it is for the users to satisfy themselves of the suitability of the product for their purposes.