Section 1: Identification of the Substance and of the Company

Product Name: Sodium Nitrate
Supplier: SQM Northamerica Corporation
Address: 3101 Towercreek Parkway, Suite 450
          Atlanta, GA 30339
Telephone: (770) 916 9400
Fax: (770) 916 9401
Emergency Number: (800) 424 9300 (CHEMTREC)

Section 2: Composition/Information on Ingredients

Chemical Name: Sodium Nitrate
CAS No.: 7631-99-4
EINECS No.: 231-554-3
Molecular Weight: 84.99
Formula: NaNO₃

Section 3: Hazards Identification

Emergency Overview
Oxidizer. Contact with combustible material will not cause spontaneous ignition. However, substance will enhance an existing fire. (Class 1 Oxidizer according to NFPA).

NFPA Ratings
Health: 1
Flammability: 0
Reactivity: 1
Special: Oxidizer

Potential Health Effects
Inhalation: Inhalation of dust irritates the respiratory tract. Symptoms may include coughing.
Ingestion: Hazardous in case of ingestion.
Skin Contact: May cause irritation, specially with wet skin.
Eye Contact: May cause irritation, eye redness, itching and pain.
Section 4: First Aid Measures

General Information
In case of persisting adverse effects consult a physician.

Specific Measures
Inhalation: Remove to fresh air. Get medical attention for any breathing difficulty.
Ingestion: Induce vomiting. Never give anything by mouth (oral) to an unconscious person.
Skin Contact: In case of irritation, remove clothing. Wipe excess from skin. Wash with soap and water for at least 5 minutes.
Eye Contact: Flush eyes with plenty of water, lifting lower and upper eyelids occasionally.

Section 5: Firefighting Measures

Fire: Non combustible, but may cause ignition by contact with combustible substances. For thermal decomposition products, refer to Section 10.
Extinguishing Media
- Suitable: Any mean suitable for extinguishing surrounding fire. Spray water for small fires. For large fires flood with abundant water
- Not Suitable: -
Protective equipment: Refer to section 8.

Section 6: Accidental Release Measures

Personal Precautions: Ventilate the area. Use personal protective equipment (Section 8).
Environmental Precautions: Do not discharge into drains. Avoid surface and ground water contamination.
Methods for Cleaning Up/Taking Up: Pick up the product mechanically and store in suitable containers for recovery or disposal.

Section 7: Handling and Storage

Handling
Special Procedures: None
Safe Handling Procedures
Minimize dust generation. Avoid contact with eyes and skin.

Special Advices
Does not present any known incompatibility.

Storage
Special Requirements: Reseal carefully any opened container and set upright to avoid leakages. Keep the product in the original containers.
Storage Conditions: Keep away from flammable substances. Do not store with combustibles reducing agents. Keep containers tightly closed in well ventilated and cool place.

Section 8 : Exposure Controls / Personal Protection

Exposure Limits
Suggested according to US regulations: 15 mg/m³ (total dust); 5 mg/m³ (respirable fraction)

Exposure Controls
Local exhaust ventilation to keep low dust environment.

Personal Protective Equipment
Respiratory: Dust mask
Eyes: Safety goggles required all the time.
Hands: Nitrile rubber gloves, over 0.11 mm thickness, > 480 min breakthrough time.

Hygiene Measures
Do not drink, eat or smoke during product manipulation. Keep away from foodstuffs and beverages. Wash hands before breaks and after work.

Personal Protective Equipment
Wear dust mask if necessary, nitrile rubber gloves and chemical safety goggles.

Hygiene Measures
Do not drink, eat or smoke during product manipulation. Keep away from foodstuffs and beverages. Wash hands before breaks and after work.

Section 9 : Physical and Chemical Properties

Physical Form: Solid, prilled or crystalline
Colour: White
Odour: Odourless
pH : 6-9 (5% aqueous solution)
Melting Point : 308°C
Boiling Point : not applicable
Flash Point : not applicable
Flammability : not flammable
Explosive Properties : not applicable
Thermal Decomposition : 380°C
Specific Gravity : 2.26 g/mL
Water Solubility : 480 g/L (20 °C)
Partition Coefficient (log Pow) : not applicable

**Section 10 : Stability and Reactivity**

Stability : Stable under normal storage and temperature conditions.

Conditions to avoid : Reacts with flammable and reducing substances.

Hazardous Decomposition Products : Nitrous oxides, sodium nitrite and sodium oxide by thermal decomposition.

**Section 11 : Toxicological Information**

**Acute Data**
Oral LD<sub>50</sub> (rat) : 1267 mg/Kg
Dermal LD<sub>50</sub> (rat) : no data available
Inhalation LC<sub>50</sub> : no data available

**Short-term Effects**
Inhalation may cause irritation of the respiratory tract. Can cause skin and eye irritation.

**Chronic Effects**
No adverse effects observed on developmental toxicity. Equivocal carcinogenic agent according to animal tests. Mutagenic and reproductive hazard at very high level doses according to animal tests.
Section 12 : Ecological Information

General
Do not discharge into drains and water or public depositories.

Environmental Fate
Dissociates into sodium and nitrate ions. Nitrates may be absorbed by plants and converted into organic nitrogen, whereas sodium binds to clay particles in the soil.

Zooplankton Toxicity           Fish Toxicity
Species : Daphnia magna       Species: Rainbow trout
$LC_{50}$ 3581 mg/L (48 h)      $LC_{50}$ 1658 mg/L (96 h)

Not acutely toxic to aquatic organisms.

Mobility
Predicted Distribution : Water, 45% ; Soil, 54.7%

Section 13 : Disposal Considerations

Residues                          Licensed professional waste disposal service is required. Disposal of waste according to all federal, state and local regulations.
Empty Packaging                   Empty containers may be reused after appropriate cleansing. Packaging that can not be cleaned should be disposed in agreement with the regional waste disposal company.

Section 14 : Transport Information

Rail & Road (DOT) – Sea (IMDG Code) – Air (IATA)
Proper Shipping Name             Sodium Nitrate.
UN Number                        1498
Class                            5.1
Packaging Group                  III
Hazard Label                     Oxidizing
                                 Harmful
Section 15 : Regulatory Information

US Classification

Indication of Danger  Oxidizing. Harmful.

Risk statements  Contact with combustible material may cause fire. Harmful is swallowed.

Safety Statements  Keep away from combustible material. Avoid contact with skin and eyes.

SARA  Not listed

TSCA  Listed

California Prop. 65  Not listed

Section 16 : Other Information

This MSDS complies with ANSI Standard Z400.1-2004.

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