

# SQM North America Corp. - Potassium Nitrate

## Material Safety Data Sheet

### SECTION I

### IDENTIFICATION

<b>CHEMICAL NAME/TRADE NAME</b> Potassium Nitrate	<b>CHEMICAL SYNONYMS</b> Chile Saltpeter	<b>CAS. NO.</b> 7757-79-1
<b>CHEMICAL FAMILY</b> Nitrates	<b>DESCRIPTION</b> White Solid Prills (Pellets) or Crystals	<b>PERCENT (MIN.)</b> 99.0
<b>CHEMICAL FORMULA</b> KNO <sub>3</sub>	<b>GRADE</b> Technical	<b>MOL. WT.</b> 101.1

### SECTION II

### MANUFACTURERS INFORMATION

<b>MANUFACTURERS NAME</b> Sociedad Quimica y Minera de Chile, S.A., Santiago, Chile	<b>EMERGENCY TELEPHONE NUMBERS</b> Chemtrec 1-800-424-9300; SQM North America Corp. 770-916-9400	
<b>ADDRESS</b> SQM North America Corp. 3101 Towercreek Parkway, Suite 450 Atlanta, GA 30339	<b>FOR INFORMATION</b> Phone: 770-916-9400 Fax: 770-916-9401	
	<b>DATA PREPARED</b> May 4, 1989	<b>REVISED</b> September 20, 1999

### SECTION III

### INGREDIENTS INFORMATION

<b>COMPONENT</b> Potassium Nitrate	<b>OSHA PEL</b> No Information Available	<b>ACGIH TLV</b> None Established	<b>OTHER LIMITS RECOMMENDED</b> No information Available	<b>SIGNIFICANT EFFECTS</b> None Established
---------------------------------------	---	--------------------------------------	---	--

### SECTION IV

### FIRE AND EXPLOSION DATA

<b>FLASH POINT (METHOD USED)</b> Not Applicable	<b>FLAMMALBE LIMITS</b> Not Applicable	<b>OSHA CLASSIFICATION</b> Class 1 Oxidizer
<b>FLAMMABLE EXPLOSIVE LIMITS</b> Upper Limits: Not Applicable Lower Limits: Not Applicable	<b>EXTINGUISHING MEDIA</b> Small Fires: Dry chemical, CO <sub>2</sub> , water spray or foam Large Fires: Water spray, fog or foam	
<b>SPECIAL FIRE FIGHTING PROCEDURES</b> Remove containers from fire if possible without risk. Cool containers exposed to flames with water. Use NIOSH/MSHA approved self-contained breathing apparatus where this material is involved in a fire.		
<b>UNUSUAL FIRE AND EXPLOSION HAZARDS</b> Oxidizer. Keep away from reducing agents, will explode if heated to 1,000°F in presence of reducing agents, organic materials or mixed with cyanides. Yields gaseous oxides when heated above melting point (1000°F).		

### SECTION V

### HEALTH HAZARD DATA

<b>HEALTH HAZARDS ACUTE EXPOSURE</b> Irritation of skin and/or mucous membranes. Ingestion of large amounts causes violent gastroenteritis.	<b>CHRONIC EXPOSURE</b> Anemia, methemoglobinemia, nephritis. Routes of exposure include inhalation, skin contact, and ingestion.
<b>CARCINOGENICITY</b> Potassium Nitrate has not been directly implicated as a carcinogen. A constant oral intake of nitrate containing foods or water could lead to formation of carcinogenic N-Nitroso compounds.	<b>SYMPTOMS OF OVEREXPOSURE</b> Dizziness, abdominal cramps, vomiting, headache, mental impairment, cyanosis.
<b>EMERGENCY FIRST AID PROCEDURES</b>	
<b>SKIN</b> Flush thoroughly with water.	<b>EYES</b> Flush with water for 15 minutes, call a physician.
<b>INGESTION</b> Drink water, induce vomiting by sticking finger down throat, and call a physician.	<b>INHALATION</b> Remove victim to fresh air, call a physician.

# SQM North America Corp. - Potassium Nitrate

## SECTION VI

## TOXICOLOGY

<b>ACUTE ORAL LD 50</b> Approx. 4 g/kg (Rats)	<b>CARCINOGENIC</b> Not known to be carcinogenic	<b>PRINCIPLE ROUTES OF ABSORPTION</b> Oral, inhalation, skin
<b>ACUTE DERMAL LD 50</b> Not Determined	<b>MUTAGENIC</b> Not known to be mutagenic	<b>EFFECTS OF ACUTE EXPOSURE</b> Dizziness, abdominal cramps, vomiting, headache, mental impairment, cyanosis. May cause eye, skin, and mucous membrane irritation.
<b>ACUTE INHALATION LC 50</b> Not Determined	<b>EYE/SKIN IRRITATION</b> May be an irritant	<b>EFFECTS OF CHRONIC EXPOSURE</b> None expected at industrial use levels.

## SECTION VII

## REACTIVITY DATA

<b>STABILITY (UNDER NORMAL CONDITIONS)</b> Stable <input checked="" type="checkbox"/> Unstable <input type="checkbox"/>	<b>HAZARDOUS DECOMPOSITION</b> Produces oxides of nitrogen.
<b>HAZARDOUS POLYMERIZATION</b> May Occur <input type="checkbox"/> Will Not Occur <input checked="" type="checkbox"/>	<b>INCOMPATIBILITY (MATERIALS TO AVOID)</b> Avoid contact with reducing agents and flammable or combustible materials.

## SECTION VIII

## PHYSICAL DATA

<b>BOILING POINT</b> Not Applicable	<b>MELTING POINT</b> 334°C	<b>VAPOR PRESSURE</b> Not Applicable (MM/Hg)	<b>APPEARANCE</b> White Prills (Pellets) or Crystals
<b>SOLUBILITY IN WATER</b> 31 g/100 cc at 20°C	<b>SPECIFIC GRAVITY</b> 2.109 (H <sub>2</sub> O =1)	<b>VAPOR DENSITY</b> Not Applicable (Air = 1)	<b>EVAPORATION RATE</b> No Information Available

## SECTION IX

## SAFE HANDLING & USE PRECAUTIONS

<b>WASTE DISPOSAL METHOD</b> Sanitary landfill in accordance with federal, state and local regulations.	<b>OTHER PRECAUTIONS</b> Wood and empty paper bags used to hold this product should be removed from the premises.
<b>IN CASE MATERIAL IS RELEASED OR SPILLED</b> Wear impervious gloves, boots, wear goggles, coveralls. Wear NIOSH/MSHA approved dust respirator. Sweep or shovel up spilled material.	<b>HANDLING AND STORING PRECAUTIONS</b> Store away from reducing agents and liquids of low flash points.

## SECTION IX

## CONTROL MEASURES

<b>RESPIRATORY PROTECTION</b> NIOSH/MSHA-Approved dust type respirator.	<b>VENTILATION</b> Mechanical (General)
<b>PROTECTIVE GLOVES</b> Impervious – butyl or rubber.	<b>EYE PROTECTION</b> Goggles
<b>OTHER PROTECTIVE CLOTHING OR EQUIPMENT</b> Coveralls and impervious boots.	<b>WORK/HYGENIC PRACTICES</b> Follow recommendations in Section IX and use precautions and wash skin and clothing after contact.

Material contained herein complies with OSHA communications standard, 29 CFR 1910. 1200. Standard must be consulted for specific requirements. The information contained herein is, to best of our knowledge and belief, accurate. However SQM Potassium Nitrate is sold without representations or warranties, express or implied, of fitness for use or purpose or of merchantability beyond the description of said material on the face hereof, and is sold on the condition that seller shall not be liable for accident, injury, or damage occasioned during or resulting from the transportation, handling, storage, sale or use of the material. In the event of chemical emergencies involving a spill, leak, fire, exposure or accident involving chemical call Chemtrec: 800-424-9300.



**SAL CHEMICAL CO., INC.**

Half Moon Industrial Park  
3036 Birch Drive  
Weirton, WV 26062

Phone (304) 748-8200  
Fax (304) 797-8751