

# Safety Data Sheet

## Sodium Nitrate, Granular, ACS

### 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** Sodium Nitrate, Granular, ACS

**Synonyms/Generic Names:** Chile saltpeter; soda niter; Sodium saltpeter; Nitric acid, sodium salt; Nitratine

**Product Number:** 5240

**Product Use:** Industrial, Manufacturing or Laboratory use

**Manufacturer:** Columbus Chemical Industries, Inc.  
N4335 Temkin Rd.  
Columbus, WI. 53925

**For More Information Call:** 920-623-2140 (Monday-Friday 8:00-4:30)

**In Case of Emergency Call:** CHEMTREC - 800-424-9300 or 703-527-3887 (24 Hours/Day, 7 Days/Week)

### 2. HAZARDS IDENTIFICATION

**OSHA Hazards:** Oxidizer, Harmful by ingestion, Target organ effect

**Target Organs:** Blood, Central nervous system

**Signal Word:** Warning

**Pictograms:**



**GHS Classification:**

Oxidizing solids	Category 3
Acute toxicity, Oral	Category 4
Eye irritation	Category 2A

**GHS Label Elements, including precautionary statements:**

**Hazard Statements:**

H272	May intensify fire; oxidizer.
H302	Harmful if swallowed.
H319	Causes serious eye irritation.

**Precautionary Statements:**

P210	Keep away from heat.
P220	Keep/Store away from clothing/combustible materials.
P221	Take any precaution to avoid mixing with combustibles.
P264	Wash hands thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.

P280	Wear protective gloves/eye protection/face protection.
P301+P312	IF SWALLOWED: Call a POISON CENTER/doctor/physician if you feel unwell.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P330	Rinse mouth.
P337+P313	If eye irritation persists: Get medical advice/attention.
P370+P378	In case of fire: Use appropriate media to extinguish.
P501	Dispose of contents/container in accordance with local regulations.

#### Potential Health Effects

<b>Eyes</b>	May cause eye irritation.
<b>Inhalation</b>	May be harmful if inhaled. Causes respiratory tract irritation.
<b>Skin</b>	Harmful if absorbed through skin. Causes skin irritation.
<b>Ingestion</b>	Harmful if swallowed.

#### NFPA Ratings

<b>Health</b>	1
<b>Flammability</b>	0
<b>Reactivity</b>	1
<b>Specific hazard</b>	OX

#### HMIS Ratings

<b>Health</b>	1
<b>Fire</b>	0
<b>Reactivity</b>	1
<b>Personal</b>	E

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	Weight %	CAS #	EINECS# / ELINCS#	Formula	Molecular Weight
Sodium Nitrate	>99	7631-99-4	231-554-3	NaNO <sub>3</sub>	84.99 g/mol

### 4. FIRST-AID MEASURES

<b>Eyes</b>	Rinse with plenty of water for at least 15 minutes and seek medical attention if necessary.
<b>Inhalation</b>	Move casualty to fresh air and keep at rest. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention if necessary.
<b>Skin</b>	Flush with plenty of water for at least 15 minutes while removing contaminated clothing and wash using soap. Get medical attention if necessary.
<b>Ingestion</b>	<b>Do Not Induce Vomiting!</b> Never give anything by mouth to an unconscious person. If conscious, wash out mouth with water. Get medical attention if necessary.

### 5. FIRE-FIGHTING MEASURES

<b>Suitable (and unsuitable) extinguishing media</b>	Product is not flammable. Use appropriate media for adjacent fire. Cool containers with water.
<b>Special protective equipment and precautions for firefighters</b>	Wear self-contained, approved breathing apparatus and full protective clothing, including eye protection and boots.
<b>Specific hazards arising from the chemical</b>	Emits toxic fumes (sodium oxides, nitrogen oxides) under fire conditions. (See also Stability and Reactivity section).

### 6. ACCIDENTAL RELEASE MEASURES

<b>Personal precautions, protective equipment and emergency procedures</b>	See section 8 for recommendations on the use of personal protective equipment.
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<b>Environmental precautions</b>	Prevent spillage from entering drains. Any release to the environment may be subject to federal/national or local reporting requirements.
<b>Methods and materials for containment and cleaning up</b>	Pick up and arrange disposal without creating dust. Sweep up and place in suitable, closed containers for disposal. Clean surfaces thoroughly with water to remove residual contamination. Dispose of all waste and cleanup materials in accordance with regulations.

## 7. HANDLING AND STORAGE

### Precautions for safe handling

See section 8 for recommendations on the use of personal protective equipment. Use with adequate ventilation. Wash thoroughly after using. Keep container closed when not in use. Avoid formation of dusts.

### Conditions for safe storage, including any incompatibilities

Store in cool, dry well ventilated area. Keep away from incompatible materials (see section 10 for incompatibilities).

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Occupational exposure controls:** Contains no substances with occupational exposure limit values.

### Personal Protection

<b>Eyes</b>	Wear chemical safety glasses or goggles.
<b>Inhalation</b>	Provide local exhaust, preferably mechanical. If exposure levels are excessive, use an approved respirator.
<b>Skin</b>	Wear nitrile or rubber gloves, apron or lab coat.
<b>Other</b>	Not Available

### Other Recommendations

Provide eyewash stations, quick-drench showers and washing facilities accessible to areas of use and handling.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance (physical state, color, etc.)	White solid.
Odor	Not Available
Odor threshold	Not Available
pH	Not Available
Melting point/freezing point	308°C (586.4°F)
Initial boiling point and boiling range	380°C (716°F)
Flash point	Not Flammable
Evaporation rate	Not Available
Flammability (solid, gas)	Not Flammable
Upper/lower flammability or explosive limit	Not Explosive
Vapor pressure	Not Available
Vapor density	Not Available
Density	2.26 (Water = 1)
Solubility (ies)	Soluble in cold water. Partially soluble in methanol. Very slightly soluble in acetone. Very slightly soluble in glycerol. Very soluble in liquid ammonia.
Partition coefficient: n-octanol/water	log Pow: -3.8
Auto-ignition temperature	Not Available
Decomposition temperature	308°C (586.4°F)

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## 10. STABILITY AND REACTIVITY

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<b>Chemical Stability</b>	Stable
<b>Possibility of Hazardous Reactions</b>	Will not occur.
<b>Conditions to Avoid</b>	Fusion of mixtures of metal cyanides, including lead thiocyanate, with metal chlorates, perchlorates, nitrates or nitrites causes a violent explosion. Heat.
<b>Incompatible Materials</b>	Strong acids, strong reducing agents, powdered metals, organic materials, alkali metals, alkaline earth metals, cyanides, thiocyanates.
<b>Hazardous Decomposition Products</b>	Sodium oxides, nitrogen oxides.

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## 11. TOXICOLOGICAL INFORMATION

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### Acute Toxicity

#### *Sodium Nitrate*

<b>Skin</b>	Not Available
<b>Eyes</b>	Not Available
<b>Respiratory</b>	Not Available
<b>Ingestion</b>	LD50 Oral - rat - 1,267 mg/kg LD50 Oral - rabbit - 2,680 mg/kg LDLO Oral - Child - 22.5 mg/kg
<b>Other</b>	LD50 Intravenous - mouse - 175 mg/kg

### Carcinogenicity

<b>IARC</b>	No components of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
<b>ACGIH</b>	No components of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
<b>NTP</b>	No components of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
<b>OSHA</b>	No components of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

### Signs & Symptoms of Exposure

<b>Skin</b>	Redness, itching, and pain.
<b>Eyes</b>	Irritation, redness, watering eyes, itchiness.
<b>Respiratory</b>	Coughing, shortness of breath.
<b>Ingestion</b>	Gastroenteritis, abdominal pain, nausea, vomiting, diarrhea, metabolism acidosis, muscular weakness, dizziness, fatigue, headache, mental impairment, in coordination, convulsions, accelerated heart rate, orthostatic hypotension, dyspnea, and in severe cases, methemoglobinemia due to inadequate oxygenation of the blood leading to progressive cyanosis, and coma. Cyanosis is first visible as a bluish discoloration of the mucous membranes and unpigmented areas of the body. Purging and diuresis can be expected. Rare cases of nitrates being converted into more toxic nitrites.

\*Onset may be delayed 2 to 4 hours or longer.

<b>Chronic Toxicity</b>	May cause damage to the following organs: blood.
<b>Teratogenicity</b>	Not Available
<b>Mutagenicity</b>	May affect genetic material.
<b>Embryotoxicity</b>	Not Available
<b>Specific Target Organ Toxicity</b>	Not Available
<b>Reproductive Toxicity</b>	May cause adverse reproductive effects based on animal test data.
<b>Respiratory/Skin Sensitization</b>	Not Available

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## 12. ECOLOGICAL INFORMATION

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### Ecotoxicity

#### *Sodium Nitrate*

<b>Aquatic Vertebrate</b>	LC50 - <i>Gambusia affinis</i> (Mosquito fish) - 6,650 mg/l - 96 h
<b>Aquatic Invertebrate</b>	EC50 - <i>Daphnia magna</i> (Water flea) - 6,000 mg/l - 24 h
<b>Terrestrial</b>	Not Available

<b>Persistence and Degradability</b>	Not Available
<b>Bioaccumulative Potential</b>	Not Available
<b>Mobility in Soil</b>	Not Available
<b>PBT and vPvB Assessment</b>	Not Available
<b>Other Adverse Effects</b>	Not Available

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## 13. DISPOSAL CONSIDERATIONS

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<b>Waste Product or Residues</b>	Users should review their operations in terms of the applicable federal/national or local regulations and consult with appropriate regulatory agencies if necessary before disposing of waste product or residue.
<b>Product Containers</b>	Users should review their operations in terms of the applicable federal/national or local regulations and consult with appropriate regulatory agencies if necessary before disposing of waste product container.

The information offered in section 13 is for the product as shipped. Use and/or alterations to the product may significantly change the characteristics of the material and alter the waste classification and proper disposal methods.

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## 14. TRANSPORTATION INFORMATION

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US DOT	UN1498, Sodium nitrate, 5.1, pg III
TDG	UN1498, SODIUM NITRATE, 5.1, pg III
IMDG	UN1498, SODIUM NITRATE, 5.1, pg III
Marine Pollutant	No
IATA/ICAO	UN1498, Sodium nitrate, 5.1, pg III

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## 15. REGULATORY INFORMATION

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TSCA Inventory Status	All ingredients are listed on the TSCA inventory.
DSCL (EEC)	All ingredients are listed on the DSCL inventory.
California Proposition 65	Not Listed
SARA 302	Not Listed
SARA 304	Not Listed
SARA 311	Reactivity Hazard, Acute Health Hazard
SARA 312	Reactivity Hazard, Acute Health Hazard
SARA 313	Not Listed
WHMIS Canada	Class C: Oxidizing material. Class D2A: Very toxic material causing other toxic effects. Class D-2B: Material causing other toxic effects (TOXIC).

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## 16. OTHER INFORMATION

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Revision	Date
Revision 1	08-20-2012
Revision 2	04/28/2015

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