

## Section 1: Product & Company Information

### Product Identifier: Sodium Nitrate 46% Solution

#### Other Means of Identification

Product Number: 131510

#### Recommended Use and Restrictions on Use

Recommended Use: Chemical Intermediate/additive  
Restrictions on Use: No data available.

#### Manufacturer / Importer / Supplier / Distributor Information

**Company Name:** CORECHEM Inc.

**Address:** 4320 Greenway Drive  
Knoxville, TN 37918  
USA

**Information Telephone Number:** 1-865-524-4239

**Fax Number:** 1-865-524-3375

**Website:** [www.corecheminc.com](http://www.corecheminc.com)

**Contact Person:** Regulatory Manager

**E-mail:** [regulatory@corecheminc.com](mailto:regulatory@corecheminc.com)

**Emergency Phone Number:** Chemtrec® 1-800-424-9300 / Outside USA 1-703-527-3887 (monitored 24 hours/day)

## Section 2: Hazards Identification

#### GHS Hazard Classification(s)

In accordance with OSHA Hazard Communication Standard 29 CFR 1910.1200 (HazCom 2012).

#### Physical Hazard(s)

Oxidizing, Liquids - 3

#### Health Hazard(s)

Acute Toxicity, Oral - 4

(Corrosion) Damage/Irritation, Eye - 1

#### Environmental Hazard(s)

Aquatic, Chronic - 3

#### Label Elements

##### Signal Word

**WARNING**

#### Hazard Symbol(s)



#### Hazard Statement(s)

H272: May intensify fire; oxidizer.

H302: Harmful if swallowed.

H318: Causes serious eye damage.

H412: Harmful to aquatic life with long lasting effects.

#### Precautionary Statements

##### General

Not applicable.

#### Prevention

P201: Obtain special instructions before use.

P202: Do not handle until all safety precautions have been read and understood.

P210: Keep away from heat/sparks/open flames/hot surfaces. No smoking.

P220: Keep/Store away from clothing/combustible materials.

P221: Take any precaution to avoid mixing with combustibles.

P243: Take precautionary measures against static discharge.

P260: Do not breathe dust/fume/gas/mist/vapors/spray.

P261: Avoid breathing dust/fume/gas/mist/vapors/spray.

P264: Wash face, hands and any exposed skin thoroughly after handling.

P270: Do not eat, drink or smoke when using this product.

P271: Use only outdoors or in a well-ventilated area.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

**Response**

P301 + P312: IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.  
P302 + P352: IF ON SKIN: Wash with plenty of soap and water.  
P304 + P340: IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.  
P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P312: Call a POISON CENTER or doctor/physician if you feel unwell.  
P330: Rinse mouth.  
P332 + P313: If skin irritation occurs: Get medical advice/attention.  
P337 + P313: If eye irritation persists: Get medical advice/attention.  
P362: Take off contaminated clothing and wash before reuse.

**Storage**

P403 + P233: Store in a well-ventilated place. Keep container tightly closed.  
P405: Store locked up.

**Disposal**

P501: Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

**Hazard(s) not otherwise classified (HNOC)**

None known.

### Section 3: Composition/Information on Ingredients

**Mixture**

Chemical Identity <sup>2</sup>	Common Name/Synonym(s)	CAS # <sup>3</sup>	Weight %	Impurity or Stabilizing Additive
Sodium Nitrate		7631-99-4	46	

1. Information regarding the composition and the percent ranges of the mixtures ingredients are not presented as it Confidential Business Information (CBI). Where a medical emergency exists (as determined by medical professional), timely disclosure of CBI is assured. The information omitted pertains to only the names of the substances and the concentration in the mixture (product) and can only be requested by a doctor/physician or Local/State/Provincial or Federal Authority.
2. Non-hazardous ingredients are not presented as to protect the proprietary formula of the product.
3. “—”Indicates ingredient is a mixture and contains multiple ingredients or may have no identifying CAS number.

### Section 4: First-Aid Measures

**General Information**

Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves. In the case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Wash contaminated clothing before reuse.

**Inhalation**

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**Skin Contact**

Take off immediately all contaminated clothing. Wash off IMMEDIATELY with plenty of water for at least 15-20 minutes. Get medical attention immediately! Wash clothing separately before reuse. Destroy or thoroughly clean contaminated shoes.

**Eye Contact**

Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician or poison control center immediately.

**Ingestion**

Call a physician or poison control center immediately. Rinse mouth. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

**Most important symptoms/effects, acute and delayed**
**Symptoms**

Irritating to eyes, respiratory system and skin.

**Indication of immediate medical attention and special treatment needed**
**Hazards**

No data available.

**Treatment**

Treat symptomatically. Symptoms may be delayed.

### Section 5: Fire-Fighting Measures

**General Fire Hazards**

In case of fire and/or explosion do not breathe fumes. Use water spray to keep fire-exposed containers cool. Move containers from fire area if you can do so without risk. Water may be ineffective in fighting the fire. Fight fire from a protected location.

**Suitable (and Unsuitable) Extinguishing Media**
**Suitable Extinguishing Media**

Extinguishing powder, alcohol resistant foam, carbon dioxide, water fog

**Unsuitable Extinguishing Media**  
No data available.

**Specific Hazards Arising from the Chemical**  
Decomposition products may be toxic.

**Special Protective Equipment and Precautions for Firefighters**  
**Special Fire-Fighting Equipment Procedures**  
None known.

**Special Protective Equipment for Fire-Fighters**  
Sodium nitrate is an oxidizer. Wear full protective clothing and positive-pressure self-contained breathing apparatus.

## Section 6: Accidental Release Measures

**Personal Precautions, Protective Equipment and Emergency Procedures**

Use personal protective equipment. See Section 8 of the SDS for Personal Protective Equipment. Keep unauthorized personnel away. Ventilate closed spaces before entering them. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Evacuate area.

**Methods and Materials for Containment and Clean-Up**

Eliminate all ignition sources if safe to do so. Absorb spill with vermiculite or other inert material, then place in a container for chemical waste. Clean surface thoroughly to remove residual contamination. Dike far ahead of larger spill for later recovery and disposal.

For spills, transfer by mechanical means to a labeled, sealable container for product recovery or safe disposal. Absorb remaining liquid in sand or inert absorbent and remove to safe place.

**Large Spills:** Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb spill with inert material (e.g., dry sand or earth), then place in a chemical waste container. Following product recovery, flush area with water.

**Small Spills:** Absorb spill with vermiculite or other inert material. Clean surface thoroughly to remove residual contamination. Never return spills in original containers for re-use. For waste disposal, see Section 13 of the SDS.

**Notification Procedures**

Notify authorities if any exposure to the general public or environment occurs or is likely to occur. Local authorities should be advised if significant spillages cannot be contained.

**Environmental Precautions**

Dike for later disposal. Prevent entry into waterways, sewer, basements or confined areas. Stop the flow of material, if this is without risk. Inform authorities if large amounts are involved.

## Section 7: Handling and Storage

**Precautions for Safe Handling**

Use caution when handling/transferring. Do not get in eyes, on skin, or on clothing. Do not taste or swallow. Do not breathe mist or vapor. Use only with adequate ventilation. Wear appropriate personal protective equipment. Transfer and storage systems should be compatible. Observe good industrial hygiene practices.

**Conditions for Safe Storage, including any Incompatibilities**

Do not store above 120°F. Keep container tightly closed. Store in a cool, dry, well-ventilated place. Store away from incompatible materials (See Section 10). Ensure that all local regulations regarding handling and storage facilities are followed.

## Section 8: Exposure Controls/Personal Protection

**Control Parameters**

**Occupational Exposure Limits**

The product does not contain any relevant quantities of hazardous materials with critical values that have to be monitored in the workplace.

**Biological Limit Values**

The product does not contain any relevant quantities of hazardous materials with assigned biological limit values.

**Appropriate Engineering Controls**

No data available.

**Individual protection measures, such as personal protective equipment (PPE)**

**General Information**

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. An eye wash and safety shower must be available in the immediate work area. Use explosion-proof ventilation equipment.

**Eye/Face Protection**

Wear safety glasses with side shields.

**Skin Protection**

**Hand Protection**

Wear appropriate chemical resistant gloves.

**Other**

Wear appropriate chemical resistant clothing.

**Respiratory Protection**

If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Air-purifying respirator with an appropriate, government approved (where applicable), air-purifying filter, cartridge or canister. Contact health and safety professional or manufacturer for specific information

**Hygiene Measures**

When using, do not eat, drink or smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Discard contaminated footwear that cannot be cleaned. Wash hands before breaks and immediately after handling the product. Wash contaminated clothing before reuse. Avoid contact with eyes, skin, and clothing.

**Section 9: Physical and Chemical Properties****Appearance:**

Physical State: Liquid  
Color: Pale yellow

**Odor:**

Odor: Odorless  
Odor Threshold: No data available.

pH: ~8

Melting Point/Freezing Point: No data available.

Initial Boiling Point and Boiling Range: ~220°F

Flash Point: Not flammable.

Evaporation Rate (butyl acetate=1): No data available.

Flammability (solid, gas): No data available.

**Upper/Lower Limit on Flammability or Explosive Limits**

Flammability Limit – Upper: No data available.  
Flammability Limit – Lower: No data available.  
Explosive Limit – Upper: Not applicable.  
Explosive Limit – Lower: Not applicable.

Vapor Pressure: No data available.

Vapor Density (air =1): No data available.

Relative Density (water=1): 1.37

**Solubility(ies):**

Solubility in water: No data available.  
Solubility (other): No data available.

Partition coefficient (n-octanol/water): No data available.

Auto-Ignition Temperature: No data available.

Decomposition Temperature: No data available.

Viscosity: No data available.

**Other Information:**

Molecular Weight: No data available.  
Formula: No data available.

**Section 10: Stability and Reactivity****Reactivity**

No data available.

**Chemical Stability**

This material is expected to be stable under normal conditions of use.

**Possibility of Hazardous Reactions**

No data available.

**Conditions to Avoid**

Excessive Heat

**Incompatible Materials**

Reducing agents, combustible materials

**Hazardous Decomposition Products**

NO<sub>x</sub> (Nitrogen Oxides)

**Section 11: Toxicological Information****Information on routes of exposure**

**Ingestion:** May cause irritation to the gastrointestinal tract. May be harmful if swallowed.

**Inhalation:** May cause irritation to the respiratory tract.

**Skin Contact:** May cause irritation to the skin.

**Eye Contact:** May cause irritation to the eyes.

**Information on Toxicological Effects****Acute Toxicity (List all possible routes of exposure)****Oral**

Sodium Nitrate: 1,267 mg/Kg

**Dermal**  
No Data Available

**Inhalation**  
No Data Available

**Repeated Dose Toxicity**  
No Data Available

**Skin Corrosion/Irritation**  
No Data Available

**Serious Eye Damage/Eye Irritation**  
No Data Available

**Respiratory/Skin Sensitization**  
No Data Available

#### **Carcinogenicity**

##### **IARC Monographs on the Evaluation of Carcinogenic Risks to Humans**

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

##### **US. National Toxicology Program (NTP) Report on Carcinogens**

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

##### **US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)**

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

#### **Germ Cell Mutagenicity**

##### **In Vitro**

No mutagenic components identified.

##### **In Vivo**

No mutagenic components identified.

#### **Reproductive Toxicity**

None known.

#### **Specific Target Organ Toxicity – Single Exposure**

None known.

#### **Specific Target Organ Toxicity – Repeated Exposure**

None known.

#### **Aspiration Hazard**

Not classified.

#### **Other Effects**

Significant overexposure could potentially result in methemoglobinemia and nitrite poisoning. Symptoms might include cyanosis, increased pulse rates, nausea, vomiting, dizziness, headache, weakness, shortness of breath and stupor.

## Section 12: Ecological Information

#### **Ecotoxicity**

##### **Acute Hazards to the Aquatic Environment**

###### **Fish**

No data available.

###### **Aquatic Invertebrates**

No data available.

###### **Toxicity to Aquatic Plants**

No data available.

##### **Chronic Hazards to the Aquatic Environment**

###### **Fish**

No data available.

###### **Aquatic Invertebrates**

No data available.

###### **Toxicity to Aquatic Plants**

No data available.

#### **Persistence and Degradability**

##### **Biodegradation**

There are no data on the degradability of this product.

##### **BOD/COD Ratio**

No data available.

#### **Bioaccumulative Potential**

##### **Biocconcentration Factor (BCF)**

No data available on bioaccumulation.

##### **Partition Coefficient n-octanol / water (log Kow)**

No data available.

#### **Mobility in Soil**

The product is water soluble and may spread in water systems.

#### **Other Adverse Effects**

Harmful to aquatic life with long lasting effects. Long term degradation products may arise. Products of degradation are not expected to be hazardous.

## Section 13: Disposal Considerations

#### **Disposal Instructions**

Collect and reclaim or dispose in sealed containers at licensed waste disposal site. This material and its container must be disposed of as hazardous waste. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.

#### **Contaminated Packaging**

Handle contaminated packages in the same way as the substance itself. Emptied containers may retain hazardous residue and explosive vapors. Keep away from heat, sparks, and flames. Do not cut, puncture, or weld on or near this container. Follow label warnings until container is thoroughly cleaned or destroyed.

## Section 14: Transportation Information

#### **US Department of Transportation (DOT)**

UN Number: UN 3218

UN Proper Shipping Name: Nitrates, inorganic, aqueous solution, n.o.s

Technical Name: Sodium Nitrate

Hazard Class: 5.1

Subsidiary Hazard Risk: -

Packing Group: III

DOT Label/Placard Exemptions: Not determined

Special Provisions: 58, IB2, T4, TP1

Packaging Exceptions: 49CFR 173.152

Packaging Non-Bulk: 49CFR 173.202

Packaging Bulk: 49CFR 173.242

Reportable Quantity (RQ): 1,000lb (454kg)

Marine Pollutant: No

Poison Inhalation Hazard: No

Special precautions for user: Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Emergency Response Guidebook (ERG) #: 140

*Important Note: Shipping descriptions may vary based on mode of transport, quantities, package size, and/or origin and destination. Consult your company's Hazardous Materials/Dangerous Goods expert for information specific to your situation.*

## Section 15: Regulatory Information

#### **US Federal Regulations**

##### **Toxic Substance Control Act (TSCA), Chemical Substance Inventory, Section 8(b)**

No Data Available

##### **Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Hazardous Substance List (40 CFR 302.4)**

No Data Available

##### **Clean Air Act (CAA), Section 112(r)**

No Data Available

##### **Emergency Planning and Community Right-To-Know Act (EPCRA)**

###### **EPCRA 302 Extremely Hazardous Substance**

No Data Available

###### **EPCRA 304 Emergency Response Notification**

No Data Available

###### **EPCRA 311/312 Emergency and Hazardous Materials Reporting**

Fire Hazard: No

Sudden Release of Pressure: No

Reactive: Yes

Acute (Immediate) Health Hazard: Yes

Chronic (Delayed) Health Hazard: No

###### **EPCRA 313 Toxic Chemical Release Inventory (TRI) Reporting**

No Data Available

#### **US State Regulations**

##### **California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65)**

No Data Available

*Important Note: Due to the changing nature of regulatory requirements, the information in this document should NOT be considered all-inclusive or authoritative. Users should make their own investigations to determine the suitability of the information for their particular purposes. International, Federal, State and Local regulations should be consulted to determine compliance with all required reporting requirements.*

## Section 16: Other Information

### Hazardous Materials Identification System (HMIS®) Classification

**Health Hazard: 1**

**Chronic Health Hazard: /**

**Flammability: 0**

**Physical Hazard: 1**

(Hazard Rating: 0 – Minimal / 1 – Slight / 2 – Moderate / 3 – Serious / 4 – Severe)

### National Fire Protection Association (NFPA 704) Rating

**Health Hazard: 1**

**Fire Hazard: 0**

**Reactivity Hazard: 1**

**Special: N/A**

(Hazard Rating: 0 – Minimal / 1 – Slight / 2 – Moderate / 3 – Serious / 4 – Severe)

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### Key to Abbreviations and Acronyms

ATE - Acute Toxicity Estimate

BCF - Bioconcentration Factor

EC50 - Effective concentration, 50%

IDHL - Immediately Dangerous to Life and Health

Kg - Kilogram

l - Liter

lb - Pound

LC50 - Lethal Concentration, 50%

LD50 - Lethal Dose, 50%

mg - milligram

ml - milliliter

N/A - Not Applicable

N/D - Not Determined

PEL - Permissible Exposure Limit

REL - Recommended Exposure Limit

STEL - Short-term Exposure Limit

TWA - Time weighted average

ACGIH - American Conference of Industrial Hygienists

AIHA - American Industrial Hygiene Association

BEI - Biological Exposure Indices

CAS - Chemical Abstracts Service

DOT - US Department of Transportation

EPA - US Environmental Protection Agency

GHS - Globally Harmonized System of Classification and Labelling of Chemicals

IARC - International Agency for Research on Cancer

IATA - International Air Transport Association

IBC - Intermediate Bulk Container

IMDG - International Maritime Dangerous Goods

NIOSH - National Institute for Occupational Safety and Health

NTP - National Toxicology Program

OSHA - US Occupational Health and Safety Administration

SARA - US EPA Superfund Amendments and Reauthorization Act

TSCA - US EPA Toxic Substances Control Act

UN - United Nations

### References

HSDB® - Hazardous Substances Data Bank

### Disclaimer

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