



DUDA ENERGY LLC

## Safety Data Sheet Sodium Nitrate

### SECTION 1: Identification

#### 1.1 Product identifier

Product name	Sodium Nitrate
Product number	N/A
Brand	Unavailable
Substance name	Sodium nitrate
EC no.	231-554-3
CAS no.	7631-99-4

#### 1.2 Other means of identification

Unavailable

#### 1.3 Recommended use of the chemical and restrictions on use

Laboratory chemicals, manufacture of substances

#### 1.4 Supplier's details

Name	Duda Energy LLC
Address	1112 Brooks St. Decatur, AL 35601 USA
Telephone	256.340.4866
Fax	Unavailable
email	Unavailable

#### 1.5 Emergency phone number(s)

800.255.3924 (Chemtel)

### SECTION 2: Hazard identification

#### 2.1 Classification of the substance or mixture

**GHS classification in accordance with: (US) OSHA (29 CFR 1910.1200)**

- Eye damage/irritation (chapter 3.3), Cat. 2A
- Oxidizing solids (chapter 2.14), Cat. 3

## 2.2 GHS label elements, including precautionary statements

### Pictogram



### Signal word

Warning

### Hazard statement(s)

H272

May intensify fire; oxidizer

H319

Causes serious eye irritation

### Precautionary statement(s)

P210

Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. No smoking.

P220

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

P221

Take any precaution to avoid mixing with combustibles/...

P264

Wash ... thoroughly after handling.

P280

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

P305+P351+P338

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.

P337+P313

If eye irritation persists: Get medical advice/attention.

P370+P378

In case of fire: Use ... to extinguish.

P501

Dispose of contents/container to ...

## 2.3 Other hazards which do not result in classification

None

### Statement regarding ingredients of unknown toxicity

N/A

## SECTION 3: Composition/information on ingredients

### 3.1 Substances

Substance name	Sodium nitrate
EC no.	231-554-3
CAS no.	7631-99-4
Formula	NaNO <sub>3</sub>
Molecular weight	85.01
Other names / synonyms	Chile saltpeter, Soda Niter
Impurities and stabilizing additives	Other @ <0.1% (Impurities)

## SECTION 4: First-aid measures

### 4.1 Description of necessary first-aid measures

General advice If symptoms or effects arise or persist, call a doctor.

If inhaled	Remove from fresh air. If breathing difficulty develops, call a doctor.
In case of skin contact	Remove contaminated clothing. Wash with soap and water if irritation occurs.
In case of eye contact	Flush with water thoroughly for 15 minutes or more. Call a doctor.
If swallowed	Flush mouth with water and rinse thoroughly. Call a doctor.
Personal protective equipment for first-aid responders	General PPE. Be aware of the potential for exposure to material.

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

May cause irritation to skin, eyes, and respiratory tract.

**4.3 Indication of immediate medical attention and special treatment needed, if necessary**

Treat symptomatically. Symptoms may be delayed.

**SECTION 5: Fire-fighting measures**

**5.1 Suitable extinguishing media**

Any mean suitable for extinguishing surrounding fire. Spray water for small fires. For large fires flood with abundant water.

**5.2 Specific hazards arising from the chemical**

Strong oxidizer. Contact with combustible material may cause fire. Fire or high temperatures may cause explosive decomposition, especially if confined. Fire may produce irritating, corrosive and/or toxic gases.

**5.3 Special protective actions for fire-fighters**

Use standard protective equipment (flame retardant coat, helmet w/face shield, etc). If in enclosed spaces, use SCBA.

Use water to keep fire-exposed containers cool. Move containers from fire area if you can do so without risk. Withdraw immediately in case of rising sound from venting safety device or any discoloration of tanks due to fire. Cool containers exposed to flames with water until well after the fire is out.

**Further information**

Non-combustible but may cause ignition by contact with combustible substances.

**SECTION 6: Accidental release measures**

**6.1 Personal precautions, protective equipment and emergency procedures**

Eliminate all ignition sources (NO SMOKING, flares, sparks, or flames in immediate area). Keep unauthorized personnel away. Use personal protective equipment. Ventilate closed spaces before entering them. Do not touch damaged containers or spilled materials unless wearing appropriate protective clothing.

## **6.2 Environmental precautions**

Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses, or onto the ground. Do not contaminate water sources or sewer.

## **6.3 Methods and materials for containment and cleaning up**

Keep combustibles (wood, paper, oils, etc) away from spilled material. Avoid dust formation. Sweep up and place in a clearly labelled container for chemical waste. Collect in a non-combustible container for prompt disposal. Clean surface thoroughly to remove residual contamination.

### **Reference to other sections**

None

## **SECTION 7: Handling and storage**

### **7.1 Precautions for safe handling**

Do not handle, store, or open near an open flame or other sources of heat/ignition. Protect material from direct sunlight. Keep away from combustible material. Use personal protective equipment as required. Avoid contact with eyes, skin, and clothing. Do not breathe dust. Use only with adequate ventilation. Wash hands thoroughly after handling. Do not handle until all safety precautions have been read and understood. Obtain special instructions before use.

### **7.2 Conditions for safe storage, including any incompatibilities**

Keep material away from heat, light, sparks, and flame. Oxidizing material - store away from flammable and combustible materials. Store away from incompatible materials. Keep container tightly closed. Store in a dry, well-ventilated place.

### **Specific end use(s)**

None

## **SECTION 8: Exposure controls/personal protection**

### **8.1 Control parameters**

#### **1. Sodium nitrate (CAS: 7631-99-4 EC: 231-554-3)**

Contains no substances with occupational exposure limit values.

### **8.2 Appropriate engineering controls**

Emergency eye-wash fountains and safety showers should be available nearby in case of exposure.

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

#### **Eye/face protection**

Safety glasses/Goggles (to protect from dust)

#### **Skin protection**

Gloves and long-sleeves; prevent excessive exposure to dust.

#### **Body protection**

Chemical resistant garb. Limit skin's exposure to material.

#### **Respiratory protection**

Where dust is present, dust mask with filter type P2.

**Thermal hazards**

N/A

**Environmental exposure controls**

Prevent any unnecessary exposure through good work practice. Manage spills and leakages immediately; do not allow for release into drains, water-ways, or onto the ground.

**SECTION 9: Physical and chemical properties****Information on basic physical and chemical properties**

Appearance/form (physical state, color, etc.)	Solid Prilled or Crystalline White
Odor	None
Odor threshold	N/A
pH	6-8
Melting point/freezing point	308°C
Initial boiling point and boiling range	380°C
Flash point	No data available
Evaporation rate	No data available
Flammability (solid, gas)	No data available
Upper/lower flammability limits	No data available
Vapor pressure	No data available
Vapor density	No data available
Relative density	2.26
Solubility(ies)	Water: 874 g/l @ 20°C
Partition coefficient: n-octanol/water	log Pow: -3.799 @ 25°C
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity	No data available
Explosive properties	No data available
Oxidizing properties	Oxidizer Category 3

**SECTION 10: Stability and reactivity****10.1 Reactivity**

No hazardous reactivity when handled and stored under normal conditions.

**10.2 Chemical stability**

Stable under normal storage and temperature conditions.

**10.3 Possibility of hazardous reactions**

Unidentified

**10.4 Conditions to avoid**

Mixing with incompatible materials. Exposure to heat, sources of ignition.

**10.5 Incompatible materials**

Strong acids, strong reducing agents, powdered metals, organic materials, alkali metals, alkaline earth metals, cyanides, thiocyanates.

## 10.6 Hazardous decomposition products

(Thermal) Nitrous oxides, sodium nitrite, and sodium oxide.

## SECTION 11: Toxicological information

### Information on toxicological effects

#### Acute toxicity

LD50 Oral - Rat - 3,430 mg/kg

Inhalation: No data available

LD50 Dermal - Rat - > 5,000 mg/kg

LD50 Intravenous - Mouse - 175 mg/kg

#### Skin corrosion/irritation

Skin - Rabbit

Result: No skin irritation

(OECD Test Guideline 404)

Remarks: Read-across (Analogy)

#### Serious eye damage/irritation

Eyes - Rabbit

Result: Eye irritation

(OECD Test Guideline 405)

#### Respiratory or skin sensitization

in vivo assay - Mouse

Does not cause skin sensitisation.

(OECD Test Guideline 429)

#### Germ cell mutagenicity

Not identified as mutagenic or genotoxic.

#### Carcinogenicity

Not evidenced as carcinogenic.

#### Reproductive toxicity

Not classified

#### Summary of evaluation of the CMR properties

N/A

#### STOT-single exposure

Not classified

#### STOT-repeated exposure

Not classified

#### Aspiration hazard

Not classified

#### Additional information

None

## **SECTION 12: Ecological information**

### **Toxicity**

LC50 - Gambusia affinis (mosquito fish) - 6650 mg/l - 96hr

EC50 - Daphnia magna (water flea) - 6000 mg/l - 24hr

### **Persistence and degradability**

No data available

### **Bioaccumulative potential**

No data available

### **Mobility in soil**

No data available

### **Results of PBT and vPvB assessment**

No data available (not required/not conducted)

### **Other adverse effects**

No data available

## **SECTION 13: Disposal considerations**

### **Disposal of the product**

Disposal of this product may be subject to local regulations. Dispose of accordingly.

### **Disposal of contaminated packaging**

Emptied containers may hold product residue/waste material. Handle and dispose of these containers in accordance with any/all applicable regulations.

### **Waste treatment**

Waste material should be disposed of in accordance with local regulations.

### **Sewage disposal**

Prevent exposure to sewage or water-ways.

### **Other disposal recommendations**

None

## **SECTION 14: Transport information**

### **DOT (US)**

UN Number: UN1498

Class: 5.1

Packing Group: III

Proper Shipping Name: Sodium Nitrate

Reportable quantity (RQ): Unavailable

Marine pollutant: No

Poison inhalation hazard: No

**IMDG**

UN number: UN1498  
Class: 5.1  
Packing group: III  
EMS-No: F-A, S-Q  
Proper shipping name: SODIUM NITRATE

**IATA**

UN Number: UN1498  
Class: 5.1  
Packing Group: III  
Proper Shipping Name: Sodium Nitrate

**SECTION 15: Regulatory information****15.1 Safety, health and environmental regulations specific for the product in question****SARA 302 Components**

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302

**SARA 311/312 Hazards**

Reactivity hazard

**SARA 313 Components**

The following components are subject to reporting levels established by SARA Title III, Section 313:  
Sodium Nitrate CAS-7631-99-4

**Pennsylvania Right To Know Components**

Chemical name: Nitric acid, sodium salt  
CAS number: 7631-99-4

**Massachusetts Right To Know Components**

Sodium Nitrate CAS-7631-99-4

**New Jersey Right To Know Components**

Sodium Nitrate CAS-7631-99-4

**California Prop. 65 Components**

This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

**15.2 Chemical Safety Assessment**

N/A

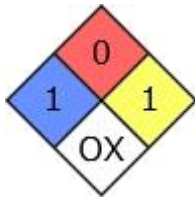
**HMIS Rating**

Sodium nitrate
<b>HEALTH</b>
<b>1</b>
<b>FLAMMABILITY</b>



PHYSICAL HAZARD 1
PERSONAL PROTECTION

NFPA Rating



## SECTION 16: Other information

### 16.1 Further information/disclaimer

The information provided in this Safety Data Sheet is correct to the best of Duda Energy LLC's knowledge, information, and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal, and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. This Safety Data Sheet only contains information relating to safety and does not replace any product information or product specification. Please note, the content may be changed, corrected, or deleted at any time without notice and may not always necessarily reflect the most current data. Duda Energy LLC will assume no responsibility for any trouble or failure caused by the errors in the information provided, nor any damage associated with the usage of the information.

### 16.2 Preparation information

Version: 2  
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