

## Material Safety Data Sheet

Section1. Product Information and Company Identification			
Product name	Sodium Nitrate		
Mol.formula	NaNO <sub>3</sub>	CAS NO	7631-99-4
Mol.wt	85 g/mol		
Manufacture name	Pioneers for laboratory chemicals		
Brand name	Piochem		
Address	Area 540, Industrial Zone 6th October city Giza, Egypt.		
Website	www.piochem.com		
E-mail	info@piochem.com		
Phone number	+201225728304 , +201023932115		

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture Classification according to Regulation (EC) No 1272/2008

Oxidizing solids (Category 3), H272

Eye irritation (Category 2), H319

For the full text of the H-Statements mentioned in this Section, see Section 16.

#### 2.2 Label elements Labelling according Regulation (EC) No 1272/2008 Pictogram



Signal word

Warning

Hazard statement(s)

H272

May intensify fire; oxidizer.

H319

Causes serious eye irritation.

Precautionary statement(s)

P220

Keep/Store away from clothing/ combustible materials.

P305 + P351 + P338

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

Supplemental Hazard  
Statements

none

#### 2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

### SECTION 3: Composition/information on ingredients 3.1 Substances

Formula : NaNO<sub>3</sub>

Molecular weight : 84.99 g/mol

CAS-No. : 7631-99-4  
EC-No. : 231-554-3

**Hazardous ingredients according to Regulation (EC) No 1272/2008**

Component		Classification	Concentration
<b>Sodium nitrate</b>			
CAS-No.	7631-99-4	Ox. Sol. 3; Eye Irrit. 2; H272,	<= 100 %
EC-No.	231-554-3	H319	

For the full text of the H-Statements mentioned in this Section, see Section 16.

**SECTION 4: First aid measures 4.1 Description of first aid measures General advice**

Consult a physician. Show this safety data sheet to the doctor in attendance.

**If inhaled**

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

**In case of skin contact**

Wash off with soap and plenty of water. Consult a physician.

**In case of eye contact**

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

**If swallowed**

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

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

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

**4.3 Indication of any immediate medical attention and special treatment needed** No data available

**SECTION 5: Firefighting measures**

**5.1 Extinguishing media Suitable**

**extinguishing media**

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**5.2 Special hazards arising from the substance or mixture** Sodium oxides **5.3 Advice for firefighters**

Wear self-contained breathing apparatus for firefighting if necessary.

**5.4 Further information**

Use water spray to cool unopened containers.

**SECTION 6: Accidental release measures 6.1 Personal precautions, protective equipment and emergency procedures**

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. For personal protection see section 8.

**6.2 Environmental precautions**

Do not let product enter drains.

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

Sweep up and shovel. Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13). Keep in suitable, closed containers for disposal.

**6.4 Reference to other sections**

For disposal see section 13.

**SECTION 7: Handling and storage 7.1 Precautions for safe handling**

Avoid contact with skin and eyes. Avoid formation of dust and aerosols.

Provide appropriate exhaust ventilation at places where dust is formed. Keep away from sources of ignition - No smoking. Keep away from heat and sources of ignition. For precautions see section 2.2.

## 7.2 Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place.  
Storage class (TRGS 510): Oxidizing hazardous materials

## 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## SECTION 8: Exposure controls/personal protection 8.1

## Control parameters 8.2

## Exposure

### controls Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday. **Personal protective equipment**

#### Eye/face protection

Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

#### Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

#### Body Protection

Impervious clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

#### Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use (EN 143) respirator cartridges as a backup to engineering controls. If the full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

#### Control of environmental exposure

Do not let product enter drains.

## SECTION 9: Physical and chemical properties 9.1

## Information on basic physical and chemical

### properties

a) Appearance	Form: solid
b) Odour	No data available
c) Odour Threshold	No data available
d) pH	9 at 100 g/l at 20 °C
e) Melting point/freezing point	306 °C
f) Initial boiling point and boiling range	380 °C
g) Flash point	No data available
h) Evaporation rate	No data available
i) Flammability(solid, gas)	No data available
j) Upper/lower flammability or explosive limits	No data available
k) Vapour pressure	No data available
l) Vapour density	No data available
m) Relative density	2.261 g/cm <sup>3</sup>

- |    |  |  |
|----|--|--|
| n) | Water solubility                           | 874 g/l at 20 °C - soluble   |
| o) | Partition coefficient:<br>n- octanol/water | log Pow: -3.799 at 25 °C   |
| p) | Auto-ignition<br>temperature               | No data available  |
| q) | Decomposition                              | No data available  |
| r) | Viscosity                                  | No data available  |
| s) | Explosive properties                       | No data available  |
| t) | Oxidizing properties                       | The substances or mixture is classified as oxidizing with the category 3 |

## 9.2 Other safety information

Bulk density 1,300 kg/m<sup>3</sup>

**SECTION 10: Stability and reactivity** **10.1 Reactivity** No data available **10.2 Chemical stability**  
Stable under recommended storage conditions.

**10.3 Possibility of hazardous reactions** No data available **10.4 Conditions to avoid**

Fusion of mixtures of metal cyanides, including lead thiocyanate, with met violent explosion. Addition of one solid component (even as a residue in dangerous. Heat

## 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

Hazardous decomposition products formed under fire conditions. - Sodium oxides  
Other decomposition products - No data available  
In the event of fire: see section 5

## SECTION 11: Toxicological information 11.1 Information on toxicological effects Acute toxicity

LD50 Oral - Rat - 3,430 mg/kg(Sodium nitrate)  
LD50 Dermal - Rat - > 5,000 mg/kg(Sodium nitrate)  
LD50 Intravenous - Mouse - 175 mg/kg(Sodium nitrate)

### Skin corrosion/irritation

Skin - Rabbit(Sodium nitrate)  
Result: No skin irritation  
(OECD Test Guideline 404)  
Remarks: Read-across (Analogy)

### Serious eye damage/eye irritation

Eyes - Rabbit(Sodium nitrate)  
Result: Eye irritation  
(OECD Test Guideline 405)

**Respiratory or skin sensitisation** in vivo assay - Mouse(Sodium nitrate)  
Does not cause skin sensitisation.  
(OECD Test Guideline 429)

### Germ cell mutagenicity

Human(Sodium nitrate)  
HeLa cell  
Unscheduled DNA synthesis  
(Sodium nitrate)  
Mouse Micronucleus test

(Sodium nitrate)  
Mouse  
Cytogenetic analysis

### **Carcinogenicity**

IARC: 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.

**Reproductive toxicity** **Specific target organ toxicity - single exposure** No data available(Sodium nitrate) **Specific target organ toxicity - repeated exposure**  
No data available

### **Aspiration hazard**

No data available(Sodium nitrate)

### **Additional Information**

RTECS:WC5600000

Absorption into the body leads to the formation of methemoglobin which in delayed 2 to 4 hours or longer.(Sodium nitrate)

## **SECTION 12: Ecological information 12.1 Toxicity**

Toxicity to fish static test LC50 - Gambusia affinis (Mosquito fish) - 6,650 mg/l - 96 h(Sodium nitrate)

Toxicity to daphnia and EC50 - Daphnia magna (Water flea) - 6,000 mg/l - 24 h(Sodium nitrate)  
other aquatic invertebrates

### **12.2 Persistence and degradability**

No data available **12.3**

**Bioaccumulativepotential** No

data available **12.4 Mobility**  
**in soil**

No data available(Sodium nitrate)

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

This substance/mixturecontains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

### **12.6 Other adverse effects** No

data available

## **SECTION 13: Disposal considerations 13.1 Waste treatment methods Product**

Contact a licensed professional waste disposal service to dispose of this material. Burn in a chemical incinerator equipped with an afterburner and scrubber b highly flammable. Offer surplus and nonrecyclable solutions to a licensed disposal company.

### **Contaminated packaging**

Dispose of as unused product.

## **SECTION 14: Transport information 14.1 UN number**

**14.2** ADR/RID: 1498 IMDG: 1498 IATA: 1498

### **UN proper shipping name**

ADR/RID: SODIUM NITRATE  
IMDG: SODIUM NITRATE  
IATA: Sodium nitrate

### **14.3 Transport hazard class(es)**

ADR/RID: 5.1 IMDG: 5.1 IATA: 5.1

#### 14.4 Packaging group

ADR/RID: III

IMDG: III

IATA: III

#### 14.5 Environmental hazards

ADR/RID: no

IMDG Marine pollutant: no

IATA: no

#### 14.6 Special precautions for user

No data available

### SECTION 15: Regulatory information

#### 15.1 Safety, health and environmental regulations/legislationspecific for the substance or mixture

This safetydatasheet complies with the requirements of Regulation (EC) No. 1907/2006.

#### 15.2 Chemical safety assessment

For this product a chemical safety assessment was not carried out

### SECTION 16: Other information

#### Full text of H-Statements referred to under sections 2 and 3.

H272 May intensifyfire; oxidizer.

H319 Causes serious eye irritation.