

# SODIUM NITRATE WITH ANTI CAKE

## Safety Data Sheet

according to Regulation (EU) 2015/830

Issue date: 7/7/2021 Revision date: 7/7/2024

Version: 1.0

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

Product form	: Substance
Trade name	: SODIUM NITRATE WITH ANTI CAKE
EC-No.	: 231-554-3
CAS-No.	: 7631-99-4
Product code	: SODIUM NITRATE WITH ANTI CAKE
Type of product	: Pure substance, Hygroscopic substance. Preventive measures apply to the substance in dry state only
Formula	: NaNO <sub>3</sub>
Synonyms	: chile saltpetre / chile salpêtre / chilean nitrate / chilean nitrate of soda / chilesalpeter / chili nitre / chili salpeter / chili salpêtre / chili salpêtre / cubic niter / cubic nitrate / cubic nitre / natratine / niter / niter, cubic / nitrate of soda / nitrate of sodium / nitrate, cubic / nitratine / nitric acid sodium salt / Peru saltpetre / soda niter / soda nitre / Sodium nitrate / sodium saltpeter / sodium(I) nitrate / synthetic nitrate of soda
Product group	: Trade product

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

##### 1.2.1. Relevant identified uses

Use of the substance/mixture : Food industry: additive

##### 1.2.2. Uses advised against

No additional information available

#### 1.3. Details of the supplier of the safety data sheet

ImproChem(Pty) Ltd T/A AECI Water  
1 Wharhirst Road  
Umbogintwini - South Africa  
T +27(31) 949 8200

#### 1.4. Emergency telephone number

Emergency number : 0800 SPILLS or 0800 774557

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### Classification according to Regulation (EC) No. 1272/2008 [CLP]

Oxidising Liquids, Category 2 H272  
Acute toxicity (oral), Category 4 H302  
Serious eye damage/eye irritation, Category 2 H319

Full text of H statements : see section 16

##### Adverse physicochemical, human health and environmental effects

No additional information available

#### 2.2. Label elements

##### Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



Signal word (CLP) :

Danger

Hazard statements (CLP) :

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

Precautionary statements (CLP) :

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

# SODIUM NITRATE WITH ANTI CAKE

## Safety Data Sheet

according to Regulation (EU) 2015/830

P220 - Keep away from clothing and other combustible materials.  
P264 - Wash hands, forearms and face thoroughly after handling.  
P280 - Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.  
P337+P313 - If eye irritation persists: Get medical advice/attention.

### 2.3. Other hazards

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Name	Product identifier	%
SODIUM NITRATE WITH ANTI CAKE	(CAS-No.) 7631-99-4 (EC-No.) 231-554-3	100

Full text of H-statements: see section 16

### 3.2. Mixtures

Not applicable

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

First-aid measures general	: Check the vital functions. Unconscious: maintain adequate airway and respiration. Respiratory arrest: artificial respiration or oxygen. Cardiac arrest: perform resuscitation. Victim conscious with laboured breathing: half-seated. Victim in shock: on his back with legs slightly raised. Vomiting: prevent asphyxia/aspiration pneumonia. Prevent cooling by covering the victim (no warming up). Keep watching the victim. Give psychological aid. Keep the victim calm, avoid physical strain. Depending on the victim's condition: doctor/hospital. Never give alcohol to drink.
First-aid measures after inhalation	: Remove the victim into fresh air. Respiratory problems: consult a doctor/medical service.
First-aid measures after skin contact	: Rinse with water. Take victim to a doctor if irritation persists.
First-aid measures after eye contact	: Rinse with water. Take victim to an ophthalmologist if irritation persists. Do not apply neutralizing agents.
First-aid measures after ingestion	: Rinse mouth with water. Immediately after ingestion: give lots of water to drink. Call Poison Information Centre ( <a href="http://www.big.be/antigif.htm">www.big.be/antigif.htm</a> ). Consult a doctor/medical service if you feel unwell. Ingestion of large quantities: immediately to hospital.

### 4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects after inhalation	: AFTER INHALATION OF DUST: Coughing.
Symptoms/effects after skin contact	: Red skin. ON CONTINUOUS EXPOSURE/CONTACT: Methemoglobinemia. Symptoms similar to those listed under ingestion.
Symptoms/effects after eye contact	: Irritation of the eye tissue. Redness of the eye tissue.
Symptoms/effects after ingestion	: AFTER ABSORPTION OF HIGH QUANTITIES: Nausea. Vomiting. Abdominal pain. Blood in stool. Methemoglobinemia. Feeling of weakness. Dizziness. Blue/grey discolouration of the skin. Low arterial pressure. Accelerated heart action. Cramps/uncontrolled muscular contractions. Disturbances of consciousness.
Chronic symptoms	: No effects known.

### 4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media	: Water spray.
Unsuitable extinguishing media	: Carbon dioxide. Dry chemical powder. Foam.

### 5.2. Special hazards arising from the substance or mixture

Fire hazard	: Contact with combustible material may cause fire. May cause or intensify fire; oxidiser. Under fire conditions closed containers may rupture or explode.
Explosion hazard	: INDIRECT EXPLOSION HAZARD. Reactions with explosion hazards: see "Reactivity Hazard".
Hazardous decomposition products in case of fire	: Nitrogen oxides.

### 5.3. Advice for firefighters

Precautionary measures fire	: Exposure to fire/heat: keep upwind. Exposure to fire/heat: consider evacuation.
Firefighting instructions	: Cool tanks/drums with water spray/remove them into safety. Do not allow water to enter the vessels, a violent reaction may occur.

# SODIUM NITRATE WITH ANTI CAKE

## Safety Data Sheet

according to Regulation (EU) 2015/830

Protection during firefighting	: Heat/fire exposure: compressed air/oxygen apparatus.
Other information	: Prevent runoff from entering water courses, sewers and basements.

### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

General measures	: Avoid contact with skin, eyes and clothing. Avoid dust formation. Do not handle until all safety precautions have been read and understood. Eliminate every possible source of ignition. Evacuate area.
------------------	---

##### 6.1.1. For non-emergency personnel

Protective equipment	: Wear recommended personal protective equipment.
Emergency procedures	: Mark the danger area. Prevent dust cloud formation. No naked flames. Keep containers closed. Wash contaminated clothes. In case of hazardous reactions: keep upwind. In case of reactivity hazard: consider evacuation.
Measures in case of dust release	: In case of dust production: keep upwind.

##### 6.1.2. For emergency responders

Protective equipment	: Wear recommended personal protective equipment.
Emergency procedures	: Cover spill with non combustible material, e.g.: sand/earth. Do not touch spilled material. Evacuate unnecessary personnel. Keep away from combustible material. Prevent from entering sewers, basements and workpits, or any place where its accumulation can be dangerous.

#### 6.2. Environmental precautions

Prevent spreading in sewers. Do not allow product to spread into the environment.

#### 6.3. Methods and material for containment and cleaning up

For containment	: Plug the leak, cut off the supply. Dam up the solid spill. Cover spill with non combustible material, e.g.: sand, earth, vermiculite.
Methods for cleaning up	: Do not take up in combustible material such as: saw dust. Prevent dust cloud formation. Scoop solid spill into closing containers. Carefully collect the spill/leftovers. Spill must not return in its original container. Clean contaminated surfaces with an excess of water. Take collected spill to manufacturer/competent authority. Wash clothing and equipment after handling. Do not discharge into drains or the environment.
Other information	: Do not discharge into drains or the environment. Keep away from naked flames/heat. Keep away from ignition sources (including static discharges).

#### 6.4. Reference to other sections

No additional information available

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

Precautions for safe handling	: Comply with the legal requirements. Clean contaminated clothing. Keep the substance free from contamination. Thoroughly clean/dry the installation before use. Do not discharge the waste into the drain. Avoid raising dust. Keep away from naked flames/heat. Observe normal hygiene standards. Keep container tightly closed. Carry operations in the open/under local exhaust/ventilation or with respiratory protection.
-------------------------------	---

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

Technical measures	: Facilities: shower, eye shower. Ensure adequate ventilation, especially in confined areas.
Storage conditions	: Keep away from ignition sources. Keep container tightly closed and dry. Keep in a cool, well-ventilated place away from acids. Keep only in the original container.
Incompatible products	: Oxidizing agent. Reducing agents. Strong acids. organic materials. water.
Incompatible materials	: Moisture. combustible materials.
Heat and ignition sources	: KEEP SUBSTANCE AWAY FROM: heat sources.
Information on mixed storage	: KEEP SUBSTANCE AWAY FROM: combustible materials. oxidizing agents. reducing agents. (strong) acids. cellulosic materials. organic materials. water/moisture.
Storage area	: Store in a dry area. Keep out of direct sunlight. Keep container in a well-ventilated place. Keep only in the original container. Meet the legal requirements.
Special rules on packaging	: SPECIAL REQUIREMENTS: closing. watertight. dry. clean. correctly labelled. meet the legal requirements. Secure fragile packagings in solid containers.
Packaging materials	: SUITABLE MATERIAL: metal. glass. synthetic material. MATERIAL TO AVOID: wood. paper.

#### 7.3. Specific end use(s)

No additional information available

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

No additional information available

# SODIUM NITRATE WITH ANTI CAKE

## Safety Data Sheet

according to Regulation (EU) 2015/830

### 8.2. Exposure controls

Personal protective equipment	: Gloves, shoulder length. Insufficient ventilation: wear respiratory protection. Protective clothing. Protective goggles. Safety Boots. Dust/aerosol mask with filter type P3.
Materials for protective clothing	: GIVE EXCELLENT RESISTANCE: nitrile rubber. GIVE GOOD RESISTANCE: butyl rubber. PVC. GIVE LESS RESISTANCE: No data available. GIVE POOR RESISTANCE: No data available
Hand protection	: Nitrile rubber
Eye protection	: Protective goggles
Skin and body protection	: Protective clothing
Respiratory protection	: Dust production: dust mask with filter type P3



## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	: Solid
Appearance	: Crystalline solid. Crystalline powder. Grains.
Molecular mass	: 84.99 g/mol
Colour	: White.
Odour	: Odourless.
Odour threshold	: No data available
pH	: 8-9,100 g/l
pH solution	: 100 g/l
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: 306 °C
Freezing point	: No data available
Boiling point	: 380 °C
Flash point	: No data available
Critical temperature	: 1048 °C
Auto-ignition temperature	: No data available
Decomposition temperature	: 380 °C
Flammability (solid, gas)	: No data available
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: 2.3
Density	: 2261 kg/m <sup>3</sup>
Solubility	: Soluble in water. Soluble in ethanol. Soluble in methanol. Soluble in ammonia. Water: 874 g/l Ethanol: 0.8 g/100ml
Partition coefficient n-octanol/water (Log Pow)	: -3.8
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: May intensify fire; oxidiser.
Explosive limits	: No data available

### 9.2. Other information

VOC content	: Not applicable (inorganic)
Other properties	: Translucent. Hygroscopic.

# SODIUM NITRATE WITH ANTI CAKE

## Safety Data Sheet

according to Regulation (EU) 2015/830

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

At very high temperature: explosive decomposition with oxidation which increases fire hazard. On burning: release of toxic and corrosive gases/vapours (nitrous vapours). Reacts violently with many compounds e.g.: with (strong) reducers, with combustible materials and with organic material: risk of spontaneous ignition. Violent to explosive reaction with (some) metal powders and with (strong) oxidizers. Reacts with (some) acids: release of toxic and corrosive gases/vapours (nitrous vapours).

#### 10.2. Chemical stability

Hygroscopic.

#### 10.3. Possibility of hazardous reactions

No additional information available

#### 10.4. Conditions to avoid

Heat.

#### 10.5. Incompatible materials

Strong acids. Reducing agents. Organic materials. cyanides. alkaline metals and acid chlorides. Alkalis, finely divided metals.

#### 10.6. Hazardous decomposition products

Nitrogen oxides.

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

Acute toxicity : Harmful if swallowed.

##### SODIUM NITRATE WITH ANTI CAKE (7631-99-4)

LD50 oral rat	1270 mg/kg (Rat; Equivalent or similar to OECD 401; Experimental value; 3430 mg/kg bodyweight; Rat)
LD50 dermal rat	> 5000 mg/kg bodyweight (Rat; Read-across; OECD 402: Acute Dermal Toxicity)

Skin corrosion/irritation	: Not classified pH: 8-9, 100 g/l
Serious eye damage/irritation	: Causes serious eye irritation. pH: 8-9, 100 g/l
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified

### SECTION 12: Ecological information

#### 12.1. Toxicity

Ecology - general	: Not classified as dangerous for the environment according to the criteria of Regulation (EC) No 1272/2008.
Ecology - air	: Not classified as dangerous for the ozone layer (Regulation (EC) No 1005/2009). Not included in the list of fluorinated greenhouse gases (Regulation (EC) No 842/2006). TA-Luft Klasse 5.2.1.
Ecology - water	: Mild water pollutant (surface water). Maximum concentration in drinking water: 50 mg/l (nitrate) (Directive 98/83/EC); 200 mg/l (sodium) (Directive 98/83/EC). Not harmful to fishes (LC50(96h) >1000 mg/l). Not harmful to invertebrates (Daphnia) (EC50 > 1000 mg/l). Not harmful to algae. May cause eutrophication. Not harmful to activated sludge.

##### SODIUM NITRATE WITH ANTI CAKE (7631-99-4)

LC50 fish 2	4650 mg/l (LC50; Other; 96 h; Salmo gairdneri; Static system; Fresh water; Experimental value)
EC50 Daphnia 2	7240 mg/l (EC50; OECD 202: Daphnia sp. Acute Immobilisation Test; 24 h; Daphnia magna; Static system; Fresh water; Experimental value)
EC50 other aquatic organisms 1	> 1700 mg/l (10 days; Algae; EC50; Other)

# SODIUM NITRATE WITH ANTI CAKE

## Safety Data Sheet

according to Regulation (EU) 2015/830

### 12.2. Persistence and degradability

SODIUM NITRATE WITH ANTI CAKE (7631-99-4)	
Persistence and degradability	Biodegradability: not applicable. No (test) data on mobility of the substance available.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable

### 12.3. Bioaccumulative potential

SODIUM NITRATE WITH ANTI CAKE (7631-99-4)	
Partition coefficient n-octanol/water (Log Pow)	-3.8
Bioaccumulative potential	Bioaccumulation: not applicable.

### 12.4. Mobility in soil

No additional information available

### 12.5. Results of PBT and vPvB assessment

No additional information available

### 12.6. Other adverse effects

No additional information available

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Regional legislation (waste)	: Disposal must be done according to official regulations.
Waste treatment methods	: Dispose of in accordance with relevant local regulations.
Sewage disposal recommendations	: Disposal must be done according to official regulations.
Product/Packaging disposal recommendations	: Remove waste in accordance with local and/or national regulations. Hazardous waste shall not be mixed together with other waste. Different types of hazardous waste shall not be mixed together if this may entail a risk of pollution or create problems for the further management of the waste. Hazardous waste shall be managed responsibly. All entities that store, transport or handle hazardous waste shall take the necessary measures to prevent risks of pollution or damage to people or animals. Precipitate/make insoluble. Remove to an authorized dump (Class I). Do not discharge into surface water.
Additional information	: Can be considered as non hazardous waste according to Directive 2008/98/EC.

## SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

### 14.1. UN number

UN-No. (ADR)	: 1498
UN-No. (IMDG)	: 1498
UN-No. (IATA)	: 1498

### 14.2. UN proper shipping name

Proper Shipping Name (ADR)	: SODIUM NITRATE
Proper Shipping Name (IMDG)	: SODIUM NITRATE
Proper Shipping Name (IATA)	: Sodium nitrate
Transport document description (ADR)	: UN 1498 SODIUM NITRATE (Sodium Nitrate), 5.1, III, (E)
Transport document description (IMDG)	: UN 1498 SODIUM NITRATE (Sodium Nitrate), 5.1, III
Transport document description (IATA)	: UN 1498 Sodium nitrate (Sodium Nitrate), 5.1, III

### 14.3. Transport hazard class(es)

<b>ADR</b>	
Transport hazard class(es) (ADR)	: 5.1
Danger labels (ADR)	: 5.1



<b>IMDG</b>	
Transport hazard class(es) (IMDG)	: 5.1

# SODIUM NITRATE WITH ANTI CAKE

## Safety Data Sheet

according to Regulation (EU) 2015/830

Danger labels (IMDG) : 5.1



### IATA

Transport hazard class(es) (IATA) : 5.1

Danger labels (IATA) : 5.1



### 14.4. Packing group

Packing group (ADR) : III

Packing group (IMDG) : III

Packing group (IATA) : III

### 14.5. Environmental hazards

Dangerous for the environment : No

Marine pollutant : No

Other information : No supplementary information available

### 14.6. Special precautions for user

#### - Overland transport

Transport regulations (ADR) : Subject to the provisions

Classification code (ADR) : O2

Limited quantities (ADR) : 5kg

Excepted quantities (ADR) : E1

Packing instructions (ADR) : P002, IBC08, LP02, R001

Special packing provisions (ADR) : B3

Mixed packing provisions (ADR) : MP10

Portable tank and bulk container instructions (ADR) : T1, BK1, BK2, BK3

Portable tank and bulk container special provisions (ADR) : TP33

Tank code (ADR) : SGAV

Tank special provisions (ADR) : TU3

Vehicle for tank carriage : AT

Transport category (ADR) : 3

Special provisions for carriage - Bulk (ADR) : VC1, VC2, AP6, AP7

Special provisions for carriage - Loading, unloading and handling (ADR) : CV24

Hazard identification number (Kemler No.) : 50

Orange plates :

Tunnel restriction code (ADR) : E

EAC code : 1Z

#### - Transport by sea

Transport regulations (IMDG) : Subject to the provisions

Special provisions (IMDG) : 964, 967

# SODIUM NITRATE WITH ANTI CAKE

## Safety Data Sheet

according to Regulation (EU) 2015/830

Limited quantities (IMDG)	: 5 kg
Excepted quantities (IMDG)	: E1
Packing instructions (IMDG)	: P002, LP02
IBC packing instructions (IMDG)	: IBC08
IBC special provisions (IMDG)	: B3
Tank instructions (IMDG)	: T1, BK2, BK3
Tank special provisions (IMDG)	: TP33
EmS-No. (Fire)	: F-A
EmS-No. (Spillage)	: S-Q
Stowage category (IMDG)	: A
Stowage and handling (IMDG)	: SW23
Properties and observations (IMDG)	: Colourless deliquescent solid. Soluble in water. Mixtures with combustible material are readily ignited and may burn fiercely. Harmful if swallowed. This substance in the impure form is known as Chile Saltpetre.

### - Air transport

Transport regulations (IATA)	: Subject to the provisions
PCA Excepted quantities (IATA)	: E1
PCA Limited quantities (IATA)	: Y546
PCA limited quantity max net quantity (IATA)	: 10kg
PCA packing instructions (IATA)	: 559
PCA max net quantity (IATA)	: 25kg
CAO packing instructions (IATA)	: 563
CAO max net quantity (IATA)	: 100kg
Special provisions (IATA)	: A803
ERG code (IATA)	: 5L

### 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

## SECTION 15: Regulatory information

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

#### 15.1.1. EU-Regulations

No REACH Annex XVII restrictions

SODIUM NITRATE WITH ANTI CAKE is not on the REACH Candidate List

SODIUM NITRATE WITH ANTI CAKE is not on the REACH Annex XIV List

VOC content : Not applicable (inorganic)

#### 15.1.2. National regulations

##### Germany

Regulatory reference	: WGK 1, Slightly hazardous to water (Classification according to AwSV; ID No. 378)
WGK remark	: Classification water polluting in compliance with Verwaltungsvorschrift wassergefährdender Stoffe (VwVwS) of 27 July 2005 (Anhang 2)
Hazardous Incident Ordinance (12. BImSchV)	: Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)

### 15.2. Chemical safety assessment

No additional information available

## SECTION 16: Other information

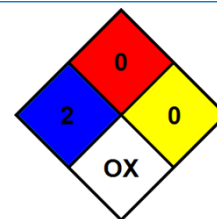


# SODIUM NITRATE WITH ANTI CAKE

## Safety Data Sheet

according to Regulation (EU) 2015/830

NFPA health hazard	: 2 - Materials that, under emergency conditions, can cause temporary incapacitation or residual injury.
NFPA fire hazard	: 0 - Materials that will not burn under typical fire conditions, including intrinsically noncombustible materials such as concrete, stone, and sand.
NFPA reactivity	: 0 - Material that in themselves are normally stable, even under fire conditions.
NFPA specific hazard	: OX - Materials that posses oxidizing properties.



### Full text of H- and EUH-statements:

Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Ox. Liq. 2	Oxidising Liquids, Category 2
H272	May intensify fire; oxidiser.
H302	Harmful if swallowed.
H319	Causes serious eye irritation.

### SDS ImproChem Test

*"DISCLAIMER: The information in this Safety Data Sheet (SDS) is believed to be correct as of the date issued. IMPROCHEM MAKES NO WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR COURSE OF PERFORMANCE OR USAGE OF TRADE. User is responsible for determining whether ImproChem's product is fit for a particular purpose and suitable for user's method of use or application. Given the variety of factors that can affect the use and application of the ImproChem product, some of which are uniquely within the user's knowledge and control, it is essential that the user evaluate ImproChem product to determine whether it is fit for a particular purpose and suitable for user's method of use or application. ImproChem provides information in electronic form as a service to its customers. Due to the remote possibility that electronic transfer may have resulted in errors, omissions or alterations in this information, ImproChem makes no representations as to its completeness or accuracy. In addition, information obtained from a database may not be as current as the information in the SDS available directly from ImproChem."*