

Printing date 08/23/2023

Reviewed on 08/23/2023

1 Identification

- · Product identifier
- · Product Name: Sodium Nitrate
- · Part Name:
- IFC-NA-1A-50
- IFC-NA-1A-100
- CAS Number:
- 7631-99-4 • EC number:
- 231-554-3
- Application of the substance / the mixture For Laboratory Use Only • Uses advised against Not for Human or Animal Use
- Details of the supplier of the safety data sheet • Manufacturer/Supplier:
- Spex CertiPrep, LLC. 203 Norcross Ave, Metuchen, NJ 08840 USA 732-549-7144 USMet-CRMSales@antylia.com
- Information department: product safety department
 Emergency telephone number: Emergency Phone Number (24 hours) CHEMTREC (800-424-9300) Outside US: 703-527-3887

2 Hazard(s) identification

· Classification of the substance or mixture



GHS03 Flame over circle

Oxidizing Solids 2 H272 May intensify fire; oxidizer.



Eye Irritation 2A H319 Causes serious eye irritation.

· Label elements

· GHS label elements The substance is classified and labeled according to the Globally Harmonized System (GHS).



· Signal word Danger · Hazard statements H272 May intensify fire; oxidizer. 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 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 CO2, powder or water spray to extinguish. P501 Dispose of contents/container in accordance with local/regional/national/international regulations. (Contd. on page 2) Printing date 08/23/2023

Product Name: Sodium Nitrate

- Classification system:
 NFPA ratings (scale 0 4)
- 200 Heat

Health = 2Fire = 3 Reactivity = 0

- The substance possesses oxidizing properties. • HMIS-ratings (scale 0 - 4)
- HEALTH2FIRE3Fire = 3REACTIVITY0
- · Other hazards
- · Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.

3 Composition/information on ingredients

- · Chemical characterization: Substances
- · CAS No. Description
- 7631-99-4 sodium nitrate
- · Identification number(s)
- EC number: 231-554-3

4 First-aid measures

- · Description of first aid measures
- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- · After skin contact: Generally the product does not irritate the skin.
- After eye contact: Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- · After swallowing: Do not give anything to eat or drink Do not induce vomitting
- · Information for Doctor:
- Most important symptoms and effects, both acute and delayed No further relevant information available.
- *Indication of any immediate medical attention and special treatment needed No further relevant information available.*

5 Fire-fighting measures

- · Extinguishing media
- · Suitable extinguishing agents: Use fire fighting measures that suit the environment.
- · Special hazards arising from the substance or mixture No further relevant information available.
- · Advice for firefighters
- · Protective equipment: No special measures required.

6 Accidental release measures

- · Personal precautions, protective equipment and emergency procedures Not required.
- · Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- Methods and material for containment and cleaning up: Dispose contaminated material as waste according to section 13.
- · Reference to other sections
- See Section 7 for information on safe handling.
- See Section 8 for information on personal protection equipment.
- See Section 13 for disposal information.

· Protective Action Criteria for Chemicals

· PAC-1:

· PAC-2:

• PAC-3:

270 mg/m³ (Contd. on page 3)

 $4.1 \ mg/m^3$

45 mg/m³

— US —

Reviewed on 08/23/2023

Page 2/7

(Contd. of page 1)

Safety Data Sheet acc. to OSHA HCS

Page 3/7

Product Name: Sodium Nitrate

(Contd. of page 2)

7 Handling and storage

- · Handling:
- · Precautions for safe handling No special precautions are necessary if used correctly.
- · Information about protection against explosions and fires: No special measures required.
- · Conditions for safe storage, including any incompatibilities
- · Storage:
- Requirements to be met by storerooms and receptacles: No special requirements.
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: Keep receptacle tightly sealed.
- Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

- Additional information about design of technical systems: No further data; see section 7.
- · Control parameters
- · Components with limit values that require monitoring at the workplace: Not required.
- Additional information: The lists that were valid during the creation were used as basis.
- · Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures:
- Keep away from foodstuffs, beverages and feed.
- Immediately remove all soiled and contaminated clothing.
- Wash hands before breaks and at the end of work.

Avoid contact with the eyes.

- Avoid contact with the eyes and skin.
- · Respiratory protection: Not required.
- · Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Penetration time of glove material The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed. • Eye protection:



Tightly sealed goggles

9 Physical and chemical properties

· Information on basic physical and · General Information	chemical properties
· Appearance:	
Form:	Crystalline
Color:	Colorless
· Odor:	Like chlorine
· Odour Threshold:	Not applicable.
· pH-value:	Not applicable.
· Change in condition	
Melting point/Melting range:	312 °C (593.6 °F)
Boiling point/Boiling range:	600-700 °C (1,112-1,292 °F)
· Flash point:	Not applicable.

(Contd. on page 4)

Product Name: Sodium Nitrate

		(Contd. of page 3
· Flammability (solid, gaseous):	Product is not flammable.	
· Decomposition temperature:	Not applicable.	
· Ignition temperature:	Not determined.	
· Danger of explosion:	Product does not present an explosion hazard.	
· Explosion limits: Lower: Upper:	Not applicable. Not applicable.	
· Vapor pressure:	Not applicable.	
Density at 20 °C (68 °F) Relative density Vapor density Evaporation rate	2.26 g/cm³ (18.8597 lbs/gal) Not applicable. Not applicable. Not applicable.	
· Solubility in / Miscibility with Water:	Soluble.	
· Partition coefficient (n-octanol/wa	ter): Not applicable.	
· Viscosity: Dynamic: Kinematic: VOC content:	Not applicable. Not applicable. 0.00 %	
Solids content:	100.0 %	
· Other information	No further relevant information available.	

10 Stability and reactivity

· Reactivity No further relevant information available.

- · Chemical stability
- · Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions No dangerous reactions known.
- · Conditions to avoid No further relevant information available.
- $\cdot \textit{Incompatible materials: No further relevant information available.}$
- · Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:
- · LD/LC50 values that are relevant for classification:
- 7631-99-4 sodium nitrate

Oral LD50 3,236 mg/kg (rat)

- · Primary irritant effect:
- on the eye: Irritating effect.
- · Sensitization: No sensitizing effects known.
- \cdot Additional toxicological information:

\cdot Carcinogenic categories

· IARC	(International	Agency for	• Research on	Cancer)
muc	1 maio mano mai	ing cincy joi	nescuren on	cuncer

Substance is not listed.

· NTP (National Toxicology Program)

Substance is not listed.

· OSHA-Ca (Occupational Safety & Health Administration)

Substance is not listed.

12 Ecological information

· Toxicity

- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.

Printing date 08/23/2023

Product Name: Sodium Nitrate

Safety Data Sheet acc. to OSHA HCS

Reviewed on 08/23/2023

(Contd. of page 4)

Page 5/7

- · Additional ecological information:
- · General notes:
- Water hazard class 1 (Assessment by list): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

- · Results of PBT and vPvB assessment
- *PBT:* Not applicable. *vPvB:* Not applicable.
- Other adverse effects No further relevant information available.

13 Disposal considerations

- · Waste treatment methods
- Recommendation: Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- · Uncleaned packagings:
- **Recommendation:** Disposal must be made according to official regulations.
- · Recommended cleansing agent: Water, if necessary with cleansing agents.

UN vamber UN1498 UN proper shipping name Sodium nitrate ODT Sodium nitrate IMB Sodium nitrate ODT Sodium nitrate IMB Sodium nitrate IMDG SODIUM NITRATE IMDG SODIUM NITRATE Imbody SI Oxidizing substances Ima	14 Transport information	
• DOT Sodium nitrate • ADR 1498 SODIUM NITRATE • INDG SODIUM NITRATE • Transport hazard class(es) DOT • DOT • Class • Class 5.1 Oxidizing substances • Label 5.1 • ADR, IMDG, IATA 5.1 • Class 5.1 Oxidizing substances • Label 5.1 • Class 5.1 Oxidizing substances • Label 5.1 • DOT, MIDG, IATA 5.1 • DOT, ADR, IMDG, IATA III • Packing group DOT, ADR, IMDG, IATA • DOT, ADR, IMDG, IATA III • Environmental hazards: Not applicable. • Solar precautions for user Warning: Oxidizing substances • Soverage Category A • Stowage Category A • Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable. • Transport in bulk according to Annex II of MARPOL73/78		UN1498
 DOT Class S.1 Oxidizing substances Label ADR, IMDG, IATA Class ADR, IMDG, IATA Class S.1 ADR, IMDG, IATA Class S.1 Solution of the second sec	DOT ADR	1498 SODIUM NITRATE
Class 5.1 Oxidizing substances Label 5.1 ADR, IMDG, IATA 5.1 Voice State Class 5.1 Oxidizing substances Label 5.1 Class 5.1 Oxidizing substances Label 5.1 Class 5.1 Oxidizing substances Label 5.1 Pecking group 11 Porty ADR, IMDG, IATA 11 Special precations for user Warning: Oxidizing substances Solowage Category A Stowage Category A Stowage Category A Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code IN applicable. Syzesial precision for Code: 50 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: Not applicable. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: E1 Maximum net quantity per inner packaging: 30 g Maximum net quantity per inner packaging: 30 g Maximum net quantity per outer packaging: 1000 g Imated quantities (EQ) Skg Code: E1 Maximum net quantity per inner packaging: 30 g	· Transport hazard class(es)	
Label 5.1 ADR, IMDG, IATA Image: Class 5.1 Oxidizing substances Label 5.1 • Class 5.1 Oxidizing substances Label 5.1 • Packing group 5.1 • DOT, ADR, IMDG, IATA III • Packing group III • DOT, ADR, IMDG, IATA III • Special precautions for user Warning: Oxidizing substances • Hazard identification number (Kemler code): 50 • Stowage Code SU23 When transported in BK3 bulk container, see 7.6.2.12 and 7.7.3.9. • Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable. Su23 When transported in BK3 bulk container, see 7.6.2.12 and 7.7.3.9. • Transport/Additional information: A • ADR Code: E1 MDR Maximum net quantity per inner packaging: 30 g • IMDG Skg • Limited quantities (EQ) 5 kg • Limited quantities (EQ) 5 kg • Locel et E1 Maximum net quantity per inner packaging: 30 g	· DOT	
ADR, IMDG, IATA ADR, IMDG, IATA Class S.1 Oxidizing substances Label S.1 Oxidizing substances Label S.1 Packing group DOT, ADR, IMDG, IATA III Environmental hazards: Not applicable. Special precautions for user Hazard identification number (Kemler code): So Sovage Category A Stowage Category A Stowage Code SW23 When transported in BK3 bulk container, see 7.6.2.12 and 7.7.3.9. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable. TransportInd ditional information: ADR Excepted quantities (EQ) Code: E1 Maximum net quantity per inner packaging: 30 g		
Label 5.1 Packing group III • DOT, ADR, IMDG, IATA III • Environmental hazards: Not applicable. • Special precautions for user Warning: Oxidizing substances • Hazard identification number (Kemler code): 50 • Stowage Category F-A,S-Q • Stowage Code SW23 When transported in BK3 bulk container, see 7.6.2.12 and 7.7.3.9. • Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable. Transport/Additional information: • ADR Code: E1 Maximum net quantities (EQ) Code: E1 Maximum net quantity per inner packaging: 1000 g • IMDG 5 kg • Limited quantities (EQ) 5 kg • Excepted quantities (EQ) 5 kg • Excepted quantities (EQ) 5 kg		
Packing group III • DOT, ADR, IMDG, IATA III • Environmental hazards: Not applicable. • Special precautions for user Warning: Oxidizing substances • Hazard identification number (Kemler code): 50 • EMS Number: F-A,S-Q • Stowage Category A • Stowage Code SW23 When transported in BK3 bulk container, see 7.6.2.12 and 7.7.3.9. • Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable. • • Transport/Additional information: • • ADR Code: E1 • Maximum net quantities (EQ) Code: E1 • IMDG Skg • Limited quantities (LQ) S kg • Excepted quantities (EQ) S kg		
· DOT, ADR, IMDG, IATA III · Environmental hazards: Not applicable. · Special precautions for user Warning: Oxidizing substances · Hazard identification number (Kemler code): 50 · EMS Number: F-A,S-Q · Stowage Category A · Stowage Code SW23 When transported in BK3 bulk container, see 7.6.2.12 and 7.7.3.9. · Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable. · Transport/Additional information: · ADR · Excepted quantities (EQ) Code: E1 Maximum net quantity per inner packaging: 30 g · IMDG · Limited quantities (LQ) 5 kg · Excepted quantities (EQ) Code: E1 Maximum net quantity per inner packaging: 30 g		5.1
Special precautions for user Warning: Oxidizing substances Hazard identification number (Kemler code): 50 EMS Number: F-A,S-Q Stowage Category A Stowage Code SW23 When transported in BK3 bulk container, see 7.6.2.12 and 7.7.3.9. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable. Transport/Additional information: • ADR • Excepted quantities (EQ) Code: E1 Maximum net quantity per inner packaging: 30 g Maximum net quantities (EQ) Imited quantities (EQ) Stowage Code: E1 Maximum net quantity per outer packaging: 1000 g Maximum net quantity per inner packaging: 1000 g		111
Hazard identification number (Kemler code): 50 EMS Number: F-A,S-Q Stowage Category A Stowage Code SW23 When transported in BK3 bulk container, see 7.6.2.12 and 7.7.3.9. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable. Transport/Additional information: · ADR · Excepted quantities (EQ) Code: E1 Maximum net quantity per inner packaging: 30 g Maximum net quantity per outer packaging: 1000 g · IMDG · Limited quantities (EQ) 5 kg Code: E1 Maximum net quantity per inner packaging: 30 g Maximum net quantity per inner packaging: 1000 g	· Environmental hazards:	Not applicable.
 Transport/Additional information: ADR Excepted quantities (EQ) Code: E1 Maximum net quantity per inner packaging: 30 g Maximum net quantity per outer packaging: 1000 g IMDG Limited quantities (LQ) 5 kg Excepted quantities (EQ) Code: E1 Maximum net quantity per inner packaging: 30 g 	· Hazard identification number (Kemler code): · EMS Number: · Stowage Category	50 F-A,S-Q A
 ADR Excepted quantities (EQ) Code: E1 Maximum net quantity per inner packaging: 30 g Maximum net quantity per outer packaging: 1000 g IMDG Limited quantities (LQ) 5 kg Excepted quantities (EQ) Code: E1 Maximum net quantity per inner packaging: 30 g 	· Transport in bulk according to Annex II of MARPOL73/78 a	nd the IBC Code Not applicable.
 Excepted quantities (EQ) Code: E1 Maximum net quantity per inner packaging: 30 g Maximum net quantity per outer packaging: 1000 g IMDG Limited quantities (LQ) 5 kg Excepted quantities (EQ) Code: E1 Maximum net quantity per inner packaging: 30 g 	· Transport/Additional information:	
• Limited quantities (LQ) 5 kg • Excepted quantities (EQ) Code: E1 Maximum net quantity per inner packaging: 30 g		Maximum net quantity per inner packaging: 30 g
	· Limited quantities (LQ)	Code: E1 Maximum net quantity per inner packaging: 30 g

Page 6/7

Product Name: Sodium Nitrate

(Contd. of page 5)

ACTIVE

· UN "Model Regulation":

UN 1498 SODIUM NITRATE, 5.1, III

15 Regulatory information

• Safety, health and environmental regulations/legislation specific for the substance or mixture No further relevant information available.

Suru	
· Section 313 (Specific toxic chemical listings):	
Substance is not listed.	

· TSCA (Toxic Substances Control Act):

• Hazardous Air Pollutants Substance is not listed.

· Proposition 65

· Chemicals known to cause cancer:

Substance is not listed.

· Chemicals known to cause reproductive toxicity for females:

Substance is not listed.

 \cdot Chemicals known to cause reproductive toxicity for males:

Substance is not listed.

• Chemicals known to cause developmental toxicity: Substance is not listed.

· Carcinogenic categories

· EPA (Environmental Protection Agency)

Substance is not listed.

· TLV (Threshold Limit Value)

Substance is not listed.

· NIOSH-Ca (National Institute for Occupational Safety and Health)

Substance is not listed.

• GHS label elements The substance is classified and labeled according to the Globally Harmonized System (GHS).

· Hazard pictograms



Signal word Danger · Hazard statements H272 May intensify fire; oxidizer. 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 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 CO2, powder or water spray to extinguish. P501 Dispose of contents/container in accordance with local/regional/national/international regulations. Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Department issuing SDS: product safety department

· Contact:

Spex CertiPrep, LLC.

1-732-549-7144

· Date of preparation / last revision 08/23/2023

US —

Safety Data Sheet acc. to OSHA HCS

Printing date 08/23/2023

Product Name: Sodium Nitrate

· Abbreviations and acronyms:

 Abbreviations and acronyms:
 ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)
 IMDG: International Maritime Code for Dangerous Goods
 DOT: US Department of Transport association
 IATA: International Air Transport Association
 IATA: International Air Transport Association
 EINECS: European Inventory of Existing Commercial Chemical Substances
 CAS: Chemical Abstracts Service (division of the American Chemical Society)
 NFPA: National Fire Protection Association (USA)
 HMIS: Hazardous Materials Identification System (USA)
 VOC: VALUE Compound (USA EU) HMIS: Hazardous Materials Identification System (VOC: Volatile Organic Compounds (USA, EU) LCS0: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative NIOSH: National Institute for Occupational Safety OSHA: Occupational Safety & Health TLV: Threshold Limit Value PEI - Permiscible Frosure Limit PEL: Permissible Exposure Limit REL: Recommended Exposure Limit Oxidizing Solids 2: Oxidizing solids – Category 2 Eye Irritation 2A: Serious eye damage/eye irritation – Category 2A



(Contd. of page 6)

Reviewed on 08/23/2023