UN1498 Sodium nitrate AGR

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878
Date of issue: 07/04/2011 Revision date: 16/07/2024 Supersedes version of: 15/03/2023 Version: 2.4

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

1.1. Product identifier

Product form	:	Substance
Trade name	:	UN1498 Sodium nitrate AGR
IUPAC name	:	sodium nitrate
EC-No.	:	231-554-3
CAS-No.	:	7631-99-4
REACH registration No	:	05-2114118315-59
Product code	:	SONA-00A
Formula	:	NaNO3

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

Relevant identified uses

Main use category	:	Laboratory use

1.3. Details of the supplier of the safety data sheet

labbox labware s.l.
Migjorn, 1
P.O. Box Barcelona (SPAIN)
08338 Premia de Dalt, SPAIN
ES
T +34 937 07 79 70, F +34 937 909 532
info@labbox.com, www.labbox.com

1.4. Emergency telephone number

Emergency number	:	+34 937 077 970 (For technical information_Office Hours) In case of medical emergency phone 112 or to your local emergency number.

Country/Area	Organisation/Company	Address	Emergency number	Comment
United Kingdom	National Poisons Information Service (Belfast Centre) Royal Victoria Hospital	Grosvenor Road BT12 6BA	0344 892 0111	

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Oxidising Solids, Category 3	H272
Serious eye damage/eye irritation, Category 2	H319

Full text of H and EUH 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) :



GHS03 GHS07

Signal word (CLP) : Warning

Hazard statements (CLP)	:	H272 - May intensify fire; oxidiser. H319 - Causes serious eye irritation.
Precautionary statements (CLP)	:	P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. 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. 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.

2.3. Other hazards

Contains no PBT/vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

SECTION 3: Composition/information on ingredients

3.1. Substances

Substance type	:	Mono-constituent
Name	:	Sodium nitrate
CAS-No.	:	7631-99-4
EC-No.	:	231-554-3

Name	Product identifier	%
SODIUM NITRATE	CAS-No.: 7631-99-4 EC-No.: 231-554-3	

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	:	Get medical advice/attention if you feel unwell.
First-aid measures after inhalation	:	Remove person to fresh air and keep comfortable for breathing. Give oxygen or artificial respiration if necessary. If you feel unwell, seek medical advice.
First-aid measures after skin contact	:	Gently wash with plenty of soap and water. Take off contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention.
First-aid measures after eye contact	:	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	:	Give water to drink. Call a physician immediately. Do not induce vomiting because of corrosive effects. Rinse mouth out with water.

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

Symptoms/effects after eye contact	:	May cause severe chemical burns to skin and cornea.

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

Never give anything by mouth to an unconscious person.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	:	Water spray. Sand.
Unsuitable extinguishing media	:	Strong water jet.

5.2. Special hazards arising from the substance or mixture

Explosion hazard	:	Heating may cause an explosion.

5.3. Advice for firefighters

Firefighting instructions : Exercise caution when fighting any chemical fire.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Emergency procedures : Do not breathe dust. See section 8 of the SDS for more information on personal protective equipment. Avoid contact with skin, eyes and clothing.

For emergency responders

Protective equipment : Breathing apparatus.

6.2. Environmental precautions

Prevent entry to sewers and public waters.

6.3. Methods and material for containment and cleaning up

For containment : Collect spillage.

Methods for cleaning up : Collect spillage. Shovel or sweep up and put in a closed container for disposal.

6.4. Reference to other sections

See Heading 8. For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed : Keep containers closed.

Precautions for safe handling : Provide good ventilation in process area to prevent formation of vapour. Protect from moisture.

Hygiene measures : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Store in a well-ventilated place. Keep container tightly closed.

Storage conditions : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Store in a well-ventilated place. Keep container tightly closed.

Storage area : Store in a dry area. Store in a cool, well-ventilated place. Labelling.

Special rules on packaging : Keep only in original container. Store in a closed container.

7.3. Specific end use(s)

Laboratory chemicals.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

DNEL and PNEC

UN1498 Sodium nitrate AGR (7631-99-4)	
DNEL/DMEL (Workers)	
Long-term - systemic effects, dermal	20,8 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	36,7 mg/m³

UN1498 Sodium nitrate AGR (7631-99-4)	
DNEL/DMEL (General population)	
Long-term - systemic effects,oral	12,5 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	10,9 mg/m³
Long-term - systemic effects, dermal	12,5 mg/kg bodyweight/day
PNEC (Water)	
PNEC aqua (freshwater)	0,45 mg/l
PNEC aqua (marine water)	0,045 mg/l
PNEC aqua (intermittent, freshwater)	4,5 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	0,0195 mg/kg dwt
PNEC sediment (marine water)	0,0223 mg/kg dwt
PNEC (Soil)	
PNEC soil	0,000733 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	18 mg/l

8.2. Exposure controls

Appropriate engineering controls

Appropriate engineering controls:
Ensure good ventilation of the work station.

Personal protection equipment

Personal protective equipment:
Avoid all unnecessary exposure. EN 374.
Personal protective equipment symbol(s):



Eye and face protection

Eye protection:
Safety glasses

Eye protection			
Type	**Field of application**	**Characteristics**	**Standard**
		With side shields	EN 166

Skin protection

Skin and body protection:
Wear suitable protective clothing

Hand protection:
Protective gloves against chemicals (EN 374)

Hand protection					
Type	**Material**	**Permeation**	**Thickness (mm)**	**Penetration**	**Standard**
		6 (> 480 minutes)	cloruro de polivinilo (PVC) - 0.7 mm de espesor del recubrimiento / caucho nitrilo (NBR) - 0.4 mm espesor del recubrimiento / caucho cloropreno (CR) - 0.5 mm de espesor del recubrimiento / caucho butílico (butilo) - 0.7 mm espesor del recubrimiento / elastómero de fluor (FKM) - 0.7 mm de espesor del recubrimiento		EN ISO 374

Respiratory protection

Respiratory protection:

Dust formation: dust mask

Respiratory protection			
Device	**Filter type**	**Condition**	**Standard**
Dust mask	Type P3		EN 143

Environmental exposure controls

Other information:

The present safety data sheet is consistent with the specific conditions relied on to justify the registration of the substance in accordance with Article 17 or 18 of the REACH regulation. Do not eat, drink or smoke when using this product. Wash hands with water as a precaution.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Solid
Colour	:	white.
Molecular mass	:	84,99 g/mol
Odour	:	odourless.
Odour threshold	:	Not available
Melting point	:	307 °C
Freezing point	:	Not available
Boiling point	:	Not available
Flammability	:	Not available
Lower explosion limit	:	Not applicable
Upper explosion limit	:	Not applicable
Flash point	:	Not applicable
Auto-ignition temperature	:	Not applicable
Decomposition temperature	:	380 °C
pH	:	7 Temp.: 25 °C
pH solution	:	Not available
Viscosity, kinematic	:	Not applicable
Solubility	:	Not available
Partition coefficient n-octanol/water (Log Kow)	:	Not available
Vapour pressure	:	Not available

Vapour pressure at 50 °C	:	Not available
Density	:	2,26 g/cm³ Type: 'density'
Relative density	:	2,26 Type: 'relative density'
Relative vapour density at 20 °C	:	Not applicable
Particle size	:	Not available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Highly reactive material.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Oxidizing materials.

10.4. Conditions to avoid

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

10.5. Incompatible materials

Strong acids. Oxidizing agent. Water. Aluminium. Metals. Sulfides (total sum of dimethyl disulfide, dimethyl sulfide and methyl mercaptan). HYPOCHLORITE SOLUTION. Organic peroxides.

10.6. Hazardous decomposition products

Nitrous fumes.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (oral)	:	Not classified
Acute toxicity (dermal)	:	Not classified
Acute toxicity (inhalation)	:	Not classified

UN1498 Sodium nitrate AGR (7631-99-4)	
LD50 oral rat	≈ 3430 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)
LD50 dermal rat	> 5000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)

Skin corrosion/irritation	:	Not classified pH: 7 Temp.: 25 °C
Serious eye damage/irritation	:	Slightly irritant but not relevant for classification pH: 7 Temp.: 25 °C
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

UN1498 Sodium nitrate AGR (7631-99-4)	
NOAEL (oral, rat, 90 days)	≥ 1500 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)

Aspiration hazard : Not classified

11.2. Information on other hazards

Other information

Potential adverse human health effects and symptoms : Toxic if swallowed.

SECTION 12: Ecological information

12.1. Toxicity

Hazardous to the aquatic environment, short-term (acute) : Not classified

Hazardous to the aquatic environment, long-term (chronic) : Not classified

UN1498 Sodium nitrate AGR (7631-99-4)	
LC50 - Fish [1]	6000 mg/l
LC50 - Fish [2]	4400 mg/l
EC50 - Daphnia [1]	8600 mg/l
EC50 72h - Algae [1]	1700 mg/l

12.2. Persistence and degradability

UN1498 Sodium nitrate AGR (7631-99-4)	
Persistence and degradability	Rapidly degradable

SODIUM NITRATE (7631-99-4)	
Persistence and degradability	Rapidly degradable

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Must follow special treatment according to local regulation.

SECTION 14: Transport information

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

14.1. UN number or ID number

UN-No. (ADR)	:	UN 1498
UN-No. (IMDG)	:	UN 1498
UN-No. (IATA)	:	UN 1498
UN-No. (ADN)	:	UN 1498
UN-No. (RID)	:	UN 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
Proper Shipping Name (ADN)	:	SODIUM NITRATE
Proper Shipping Name (RID)	:	SODIUM NITRATE
Transport document description (ADR)	:	UN 1498 SODIUM NITRATE, 5.1, III, (E)
Transport document description (IMDG)	:	UN 1498 SODIUM NITRATE, 5.1, III
Transport document description (IATA)	:	UN 1498 Sodium nitrate, 5.1, III
Transport document description (ADN)	:	UN 1498 SODIUM NITRATE, 5.1, III
Transport document description (RID)	:	UN 1498 SODIUM NITRATE, 5.1, III

14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR) : 5.1

Danger labels (ADR) : 5.1

:



IMDG

Transport hazard class(es) (IMDG) : 5.1

Danger labels (IMDG) : 5.1

:



IATA

Transport hazard class(es) (IATA) : 5.1

Danger labels (IATA) : 5.1

:



ADN

Transport hazard class(es) (ADN) : 5.1

Danger labels (ADN) : 5.1

:



RID

Transport hazard class(es) (RID) : 5.1

Danger labels (RID) : 5.1

:



14.4. Packing group

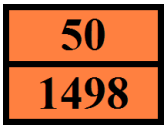
Packing group (ADR)	:	III
Packing group (IMDG)	:	III
Packing group (IATA)	:	III
Packing group (ADN)	:	III
Packing group (RID)	:	III

14.5. Environmental hazards

Dangerous for the environment	:	No
Marine pollutant	:	No
EmS-No. (Fire)	:	F-A
EmS-No. (Spillage)	:	S-Q
Other information	:	No supplementary information available

14.6. Special precautions for user

Overland transport

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
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

Special provisions (IMDG)	:	964, 967
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
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

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
ERG code (IATA)	:	5L

Inland waterway transport

Classification code (ADN)	:	O2
Limited quantities (ADN)	:	5 kg
Excepted quantities (ADN)	:	E1
Carriage permitted (ADN)	:	B
Equipment required (ADN)	:	PP
Provisions prior to loading (ADN)	:	LO04
Provisions for carriage in bulk (ADN)	:	CO02
Number of blue cones/lights (ADN)	:	0
Additional requirements/Remarks (ADN)	:	CO02 and LO04 apply only when this substance is carried in bulk or without packaging

Rail transport

Classification code (RID)	:	O2
Limited quantities (RID)	:	5kg
Excepted quantities (RID)	:	E1
Packing instructions (RID)	:	P002, IBC08, LP02, R001
Special packing provisions (RID)	:	B3
Mixed packing provisions (RID)	:	MP10
Portable tank and bulk container instructions (RID)	:	T1, BK1, BK2
Portable tank and bulk container special provisions (RID)	:	TP33
Tank codes for RID tanks (RID)	:	SGAV
Special provisions for RID tanks (RID)	:	TU3
Transport category (RID)	:	3
Special provisions for carriage – Bulk (RID)	:	VC1, VC2, AP6, AP7
Special provisions for carriage - Loading, unloading and handling (RID)	:	CW24
Colis express (express parcels) (RID)	:	CE11
Hazard identification number (RID)	:	50

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

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

EU-Regulations

REACH Annex XVII (Restriction List)

No REACH Annex XVII restrictions

REACH Annex XIV (Authorisation List)

UN1498 Sodium nitrate AGR is not on the REACH Annex XIV List

REACH Candidate List (SVHC)

UN1498 Sodium nitrate AGR is not on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

UN1498 Sodium nitrate AGR is not subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 july 2012 concerning the export and import of hazardous chemicals.

POP Regulation (Persistent Organic Pollutants)

UN1498 Sodium nitrate AGR is not subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

Ozone Regulation (1005/2009)

{0} is not subject to REGULATION (EU) No 1005/2009 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 September 2009 on substances that deplete the ozone layer.

Dual-Use Regulation (428/2009)

Contains no substance subject to the COUNCIL REGULATION (EC) No 428/2009 of 5 May 2009 setting up a Community regime for the control of exports, transfer, brokering and transit of dual-use items.

Explosives Precursors Regulation (2019/1148)

Contains no substance subject to Regulation (EU) 2019/1148 of the European Parliament and of the Council of 20 June 2019 on the marketing and use of explosives precursors.

Drug Precursors Regulation (273/2004)

Contains no substance subject to Regulation (EC) 273/2004 of the European Parliament and of the Council of 11 February 2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances.

National regulations

Germany

Water hazard class (WGK)	:	WGK 3, Highly hazardous to water (Classification according to AwSV).
Chemicals Prohibition Ordinance (ChemVerbotsV)	:	This product is subject to ChemVerbotsV Annex 2 Entry 2. The following requirement must be observed: Basic requirements for the implementation of the submission (according to § 8 paragraph 1, 3 and 4).
Hazardous Incident Ordinance (12. BImSchV)	:	Is not subject of the Hazardous Incident Ordinance (12. BImSchV)

Netherlands

SZW-lijst van kankerverwekkende stoffen	:	The substance is not listed
SZW-lijst van mutagene stoffen	:	The substance is not listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding	:	The substance is not listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid	:	The substance is not listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling	:	The substance is not listed

Denmark

Danish National Regulations	:	Young people below the age of 18 years are not allowed to use the product

15.2. Chemical safety assessment

A chemical safety assessment has been carried out

SECTION 16: Other information

Full text of H- and EUH-statements:	
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
H272	May intensify fire; oxidiser.
H319	Causes serious eye irritation.
Ox. Sol. 3	Oxidising Solids, Category 3

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.