UN2725 Nickel (II) nitrate hexahydrate EPR

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Date of issue: 06/04/2011 Revision date: 05/04/2023 Supersedes version of: 16/04/2018 Version: 2.2

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

1.1. Product identifier

Product form	:	Substance
Trade name	:	UN2725 Nickel (II) nitrate hexahydrate EPR
EC Index-No.	:	028-012-00-1
EC-No.	:	236-068-5
CAS-No.	:	13478-00-7
REACH registration No	:	05-2115399789-15
Product code	:	NINA-06T
Formula	:	Ni(NO3)2 · 6H2O

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

1.2.1. Relevant identified uses

Main use category : Laboratory use

1.2.2. Uses advised against

No additional information available

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	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 2	H272
Acute toxicity (oral), Category 4	H302
Acute toxicity (inhal.), Category 4	H332
Skin corrosion/irritation, Category 2	H315
Serious eye damage/eye irritation, Category 1	H318
Respiratory sensitisation, Category 1	H334
Skin sensitisation, Category 1	H317
Germ cell mutagenicity, Category 2	H341
Carcinogenicity (inhalation) Category 1A	H350i
Reproductive toxicity, Category 1A	H360D
Specific target organ toxicity — Repeated exposure, Category 1	H372
Hazardous to the aquatic environment — Acute Hazard, Category 1	H400
Hazardous to the aquatic environment — Chronic Hazard, Category 1	H410

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 GHS05 GHS07 GHS08 GHS09

Signal word (CLP) : Danger

Hazard statements (CLP) : H272 - May intensify fire; oxidiser.
H302+H332 - Harmful if swallowed or if inhaled.
H315 - Causes skin irritation.
H317 - May cause an allergic skin reaction.
H318 - Causes serious eye damage.
H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H341 - Suspected of causing genetic defects.
H350i - May cause cancer by inhalation.
H360D - May damage the unborn child.
H372 - Causes damage to organs through prolonged or repeated exposure.
H410 - Very toxic to aquatic life with long lasting effects.

Precautionary statements (CLP) : P201 - Obtain special instructions before use.
P202 - Do not handle until all safety precautions have been read and understood.
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.
P260 - Do not breathe dust/fume/gas/mist/vapours/spray.
P264 - Wash hands, forearms and face thoroughly after handling.

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Name	Product identifier	%
Nickel (II) nitrate hexahydrate	CAS-No.: 13478-00-7 EC-No.: 236-068-5 EC Index-No.: 028-012-00-1 REACH-no: 05-2115399789-15	≥ 98

3.2. Mixtures

Not applicable

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 : Call a physician immediately. Remove person to fresh air and keep comfortable for breathing. Give oxygen or artificial respiration if necessary.

First-aid measures after skin contact : Gently wash with plenty of soap and water. Take off immediately all contaminated clothing. If skin irritation occurs: Get medical advice/attention.

First-aid measures after eye contact : Immediately rinse with water for a prolonged period while holding the eyelids wide open. Remove contact lenses, if present and easy to do. Continue rinsing. Consult an eye specialist.

First-aid measures after ingestion : Rinse mouth. Give water to drink. Do not induce vomiting. Call a physician immediately.

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

Symptoms/effects after inhalation : May cause allergy or asthma symptoms or breathing difficulties if inhaled. Danger of serious damage to health by prolonged exposure through inhalation.

Symptoms/effects after skin contact : Causes skin irritation. May cause an allergic skin reaction.

Symptoms/effects after eye contact : Serious damage to eyes.

Symptoms/effects after ingestion : Harmful if swallowed.

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 : Making extinguishing agents environment-friendly.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Non combustible.

Hazardous decomposition products in case of fire : fume.

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.

Other information : Combustible.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Remove ignition sources.

6.1.1. For non-emergency personnel

Emergency procedures : Mechanically ventilate the spillage area.

6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.

Emergency procedures : Ventilate area.

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 : Large spills: scoop solid spill into closing containers. This material and its container must be disposed of in a safe way, and as per local legislation. On land, sweep or shovel into suitable containers. Collect spillage. Minimise generation of dust.

Other information : Dispose of materials or solid residues at an authorized site.

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	:	Take all necessary technical measures to avoid or minimize the release of the product on the workplace. Ensure good ventilation of the work station. Eliminate all ignition sources if safe to do so. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Limit quantities of product at the minimum necessary for handling and limit the number of exposed workers.
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

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 temperature	:	5 – 30 °C
Storage area	:	Store away from heat. Store in a well-ventilated place.
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

8.1.1 National occupational exposure and biological limit values

UN2725 Nickel (II) nitrate hexahydrate EPR (13478-00-7)	
EU - Indicative Occupational Exposure Limit (IOEL)	
IOEL TWA	0,25 mg/m³

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

No additional information available

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

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

8.2.2. Personal protection equipment

Personal protective equipment:
Avoid all unnecessary exposure. EN 374.

Personal protective equipment symbol(s):



8.2.2.1. Eye and face protection

Eye protection:
Safety glasses

8.2.2.2. Skin protection

Skin and body protection:
Wear suitable protective clothing

Hand protection:
Protective gloves against chemicals (EN 374)

8.2.2.3. Respiratory protection

Respiratory protection:
Wear appropriate mask

Respiratory protection			
Device	**Filter type**	**Condition**	**Standard**
	Type P2, Type P3		

8.2.2.4. Thermal hazards

No additional information available

8.2.3. 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 during use. 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	:	Green.
Molecular mass	:	290,81 g/mol
Odour	:	Not available
Odour threshold	:	Not available
Melting point	:	56 – 57 °C
Freezing point	:	Not available
Boiling point	:	Not available
Flammability	:	Not available
Explosive limits	:	Not applicable
Lower explosion limit	:	Not applicable
Upper explosion limit	:	Not applicable
Flash point	:	Not applicable
Auto-ignition temperature	:	Not applicable
Decomposition temperature	:	> 137 °C
pH	:	5 [5%, 20˚C]
pH solution	:	Not available
Viscosity, kinematic	:	Not applicable
Solubility	:	Water: 2380 g/100cm³ 20º C
Partition coefficient n-octanol/water (Log Kow)	:	Not available
Vapour pressure	:	Not available
Vapour pressure at 50 °C	:	Not available
Density	:	2,05 g/cm³ 20º C
Relative density	:	Not available
Relative vapour density at 20 °C	:	Not applicable
Particle size	:	Not available

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable in use and storage conditions as recommended in item 7.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Reacts violently with (some) acids.

10.4. Conditions to avoid

High temperature. Avoid ignition sources. Water, humidity.

10.5. Incompatible materials

Strong reducing agents. Flammable materials.

10.6. Hazardous decomposition products

Toxic vapours are released.

SECTION 11: Toxicological information

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

Acute toxicity (oral)	:	Harmful if swallowed.
Acute toxicity (dermal)	:	Not classified
Acute toxicity (inhalation)	:	Harmful if inhaled.
Skin corrosion/irritation	:	Causes skin irritation. pH: 5 [5%, 20˚C]
Serious eye damage/irritation	:	Causes serious eye damage. pH: 5 [5%, 20˚C]
Respiratory or skin sensitisation	:	May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction.
Germ cell mutagenicity	:	Suspected of causing genetic defects.
Carcinogenicity	:	May cause cancer by inhalation.
Reproductive toxicity	:	May damage the unborn child.
STOT-single exposure	:	Not classified
STOT-repeated exposure	:	Causes damage to organs through prolonged or repeated exposure.
Aspiration hazard	:	Not classified

11.2. Information on other hazards

No additional information available

SECTION 12: Ecological information

12.1. Toxicity

Hazardous to the aquatic environment, short-term (acute) : Very toxic to aquatic life.

Hazardous to the aquatic environment, long-term (chronic) : Very toxic to aquatic life with long lasting effects.

UN2725 Nickel (II) nitrate hexahydrate EPR (13478-00-7)	
LC50 - Fish [1]	10,6 mg/l Caprinus caprio
EC50 - Daphnia [1]	0,9 mg/l

12.2. Persistence and degradability

No additional information available

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

Regional legislation (waste) : Disposal must be done according to official regulations.

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

European List of Waste (LoW) code : 16 03 03* - inorganic wastes containing dangerous substances

SECTION 14: Transport information

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

14.1. UN number or ID number

UN-No. (ADR) : UN 2725

UN-No. (IMDG) : UN 2725

UN-No. (IATA) : UN 2725

UN-No. (ADN) : UN 2725

UN-No. (RID) : UN 2725

14.2. UN proper shipping name

Proper Shipping Name (ADR) : NICKEL NITRATE

Proper Shipping Name (IMDG) : NICKEL NITRATE

Proper Shipping Name (IATA) : Nickel nitrate

Proper Shipping Name (ADN) : NICKEL NITRATE

Proper Shipping Name (RID) : NICKEL NITRATE

Transport document description (ADR) : UN 2725 NICKEL NITRATE, 5.1, III, (E), ENVIRONMENTALLY HAZARDOUS

Transport document description (IMDG)	:	UN 2725 NICKEL NITRATE, 5.1, III, MARINE POLLUTANT/ENVIRONMENTALLY HAZARDOUS
Transport document description (IATA)	:	UN 2725 Nickel nitrate, 5.1, III, ENVIRONMENTALLY HAZARDOUS
Transport document description (ADN)	:	UN 2725 NICKEL NITRATE, 5.1, III, ENVIRONMENTALLY HAZARDOUS
Transport document description (RID)	:	UN 2725 NICKEL NITRATE, 5.1, III, ENVIRONMENTALLY HAZARDOUS

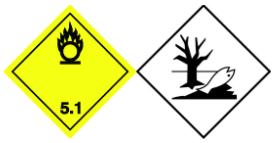
14.3. Transport hazard class(es)

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

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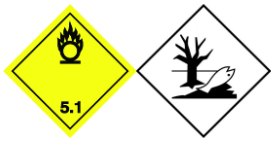
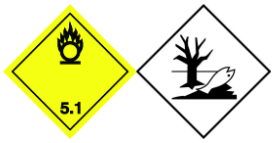


IATA

Transport hazard class(es) (IATA) : 5.1

Danger labels (IATA) : 5.1

:

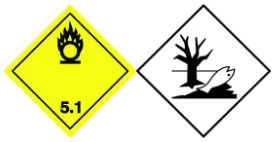


ADN

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	:	Yes
Marine pollutant	:	Yes

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
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

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
Tank special provisions (IMDG)	:	TP33
EmS-No. (Fire)	:	F-A
EmS-No. (Spillage)	:	S-Q
Stowage category (IMDG)	:	A
Properties and observations (IMDG)	:	Green deliquescent crystals. Soluble in water. Melting point: 55°C. Mixtures with combustible material are readily ignited and may burn fiercely. Solutions in water are slightly corrosive. Harmful if swallowed.

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
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

15.1.1. EU-Regulations

REACH Annex XVII (Restriction List)

EU restriction list (REACH Annex XVII)	
Reference code	**Applicable on**
28.	UN2725 Nickel (II) nitrate hexahydrate EPR

REACH Annex XIV (Authorisation List)

UN2725 Nickel (II) nitrate hexahydrate EPR is not on the REACH Annex XIV List

REACH Candidate List (SVHC)

UN2725 Nickel (II) nitrate hexahydrate EPR is not on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

UN2725 Nickel (II) nitrate hexahydrate EPR 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)

UN2725 Nickel (II) nitrate hexahydrate EPR 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)

Nickel (II) nitrate hexahydrate 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.

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.

15.1.2. National regulations

France

Occupational diseases	
Code	Description
RG 37	Professional skin disorders caused by oxides and nickel salts
RG 37 BIS	Respiratory disorders caused by oxides and nickel salts

Germany

Water hazard class (WGK) : WGK 3, Highly hazardous to water (Classification according to VwVwS, Annex 3; ID No. 387).

Chemicals Prohibition Ordinance (ChemVerbotsV) : This product is subject to ChemVerbotsV Annex 2 Entry 1. The following requirements must be observed: authorization requirement (according to § 6 paragraph 1 sentence 1), basic requirements for carrying out the delivery (according to § 8 paragraph 1, 3 and 4), identification and documentation (according to § 9 paragraph 1 to 3) and exclusion of the shipping route (according to § 10).

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
Pregnant/breastfeeding women working with the product must not be in direct contact with the product

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Full text of H- and EUH-statements:	
Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment — Chronic Hazard, Category 1
Carc. 1A	Carcinogenicity (inhalation) Category 1A
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
H272	May intensify fire; oxidiser.
H302	Harmful if swallowed.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H332	Harmful if inhaled.

Full text of H- and EUH-statements:	
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H341	Suspected of causing genetic defects.
H350i	May cause cancer by inhalation.
H360D	May damage the unborn child.
H372	Causes damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
Muta. 2	Germ cell mutagenicity, Category 2
Ox. Sol. 2	Oxidising Solids, Category 2
Repr. 1A	Reproductive toxicity, Category 1A
Resp. Sens. 1	Respiratory sensitisation, Category 1
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
STOT RE 1	Specific target organ toxicity — Repeated exposure, Category 1

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.