(in accordance with Regulation (EU) 2020/878)

NIQUEL (II) SULPHATE 6-HYDRATE

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SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING.

1.1 Product identifier.

Product Name: NIQUEL (II) SULPHATE 6-HYDRATE Chemical Name: Nickel (II)sulphate hexahydrate

CAS No: 10101-97-0

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

Different industrial uses Laboratory use

Uses advised against:

All uses not specified in this section or in section 7.3

1.3 Details of the supplier of the safety data sheet.

Company: ALQUERA CIENCIA S.L

Address: C/ Vilar de Donas 9
City: 28050 - Madrid
Province: Madrid

Telephone: +34 620 88 75 97
E-mail: info@alquera.com
Web: https://www.alquera.com

1.4 Emergency telephone number: +34 620 88 75 97 (Only available during office hours; Monday-Friday; 08:00-17:00)

SECTION 2: HAZARDS IDENTIFICATION.

2.1 Classification of the substance or mixture.

In accordance with Regulation (EC) No 1272/2008:

Acute Tox. 4: Harmful if swallowed. Aquatic Acute 1: Very toxic to aquatic life.

Carc. 1A: May cause cancer.

Muta. 2: Suspected of causing genetic defects. Repr. 1B: May damage fertility or the unborn child.

Resp. Sens. 1: May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Skin Irrit. 2: Causes skin irritation.

Skin Sens. 1: May cause an allergic skin reaction.

2.2 Label elements.

Labelling in accordance with Regulation (EC) No 1272/2008:

Pictograms:







Signal Word:

Danger

Hazard statements:

H302 Harmful if swallowed. H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

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H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H341 Suspected of causing genetic defects.

H350 May cause cancer.

H360 May damage fertility or the unborn child.

Precautionary statements:

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P280 Wear protective gloves, protective clothing, eye protection and face protection.

P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor/& if you feel unwell

P302+P352 IF ON SKIN: Wash with plenty of water/...

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. P342+P311 If experiencing respiratory symptoms: Call a POISON CENTER/doctor/...

P501 Eliminate the product and package according the regulation logal / regional / national / international

2.3 Other hazards.

The substance is not PBT

The substance is not vPvB

Substance does not have endocrine disrupting properties.

In normal use conditions and in its original form, the product itself does not involve any other risk for health and the environment.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS.

3.1 Substances.

Mono-constituent.

Identifiers	Name	Concentrate	(*)Classification - Regulation (EC) No 1272/2008	
			Classification	Specifics concentration limits and Acute toxicity estimate
CAS No: 10101-97-0	Nickel (II)sulphate hexahydrate	25 - 100 %	Acute Tox. 4, H332 - Acute Tox. 4, H302 - Aquatic Acute 1, H400 - Aquatic Chronic 1, H410 - Carc. 1A, H350 - Muta. 2, H341 - Repr. 1B, H360 - Resp. Sens. 1, H334 - STOT RE 1, H372 - Skin Irrit. 2, H315 - Skin Sens. 1, H317	-

3.2 Mixtures.

Not applicable.

SECTION 4: FIRST AID MEASURES.

IRRITANT MIXTURE. Its repeated or prolonged contact with the skin or mucous membranes can cause irritant symptoms such as reddening of the skin, blisters, or dermatitis. Some of the symptoms may not be immediate. They can cause allergic reactions on the skin.

4.1 Description of first aid measures.

Delayed effects may occur after the exposure to the product.

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<u>Inhalation</u>

Take the victim into open air; keep them warm and calm. If breathing is irregular or stops, perform artificial respiration.

Eve contact.

Remove contact lenses, if present and if it is easy to do. Wash eyes with plenty of clean and cool water for at least 10 minutes while pulling eyelids up, and seek medical assistance.

Skin contact

Remove contaminated clothing. Wash skin vigorously with water and soap or a suitable skin cleaner. NEVER use solvents or thinners.

Ingestion.

If accidentally ingested, seek immediate medical attention. Keep calm. NEVER induce vomiting.

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

Irritant Product, repeated or prolonged contact with skin or mucous membranes can cause redness, blisters or dermatitis, inhalation of spray mist or particles in suspension may cause irritation of the respiratory tract, some symptoms may not be immediate.

Harmful Product, prolonged exposure due to inhalation may cause anaesthetic effects and the need for immediate medical assistance.

Long-term chronic exposure may result in injury to certain organs or tissues.

It may cause an allergic reaction, dermatitis, redness or inflammation of the skin.

It may cause an allergic reaction in the respiratory system. Chronic exposure can lead to asthma.

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

In case of doubt or when symptoms of feeling unwell persist, get medical attention. Never administer anything orally to persons who are unconscious. Keep the person comfortable. Turn him/her over to the left side and stay there while waiting for medical care.

SECTION 5: FIREFIGHTING MEASURES.

The product is NOT classified as flammable, in case of fire the following measures should be taken:

5.1 Extinguishing media.

Suitable extinguishing media:

Extinguisher powder or CO2. In case of more serious fires, also alcohol-resistant foam and water spray.

Unsuitable extinguishing media:

Do not use a direct stream of water to extinguish. In the presence of electrical voltage, you cannot use water or foam as extinguishing media.

${\bf 5.2~Special~hazards~arising~from~the~substance~or~mixture.}$

Special risks.

Exposure to combustion or decomposition products can be harmful to your health.

5.3 Advice for firefighters.

Use water to cool tanks, cisterns, or containers close to the heat source or fire. Take wind direction into account. Prevent the products used to fight the fire from going into drains, sewers, or waterways. Product residues and extinguishing media may contaminate the aquatic environment.

Fire protection equipment.

According to the size of the fire, it may be necessary to use protective suits against the heat, individual breathing equipment, gloves, protective goggles or facemasks, and boots.

SECTION 6: ACCIDENTAL RELEASE MEASURES.

6.1 Personal precautions, protective equipment and emergency procedures.

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For exposure control and individual protection measures, see section 8.

6.2 Environmental precautions.

Product dangerous for the environment, in case of large spills or if the product contaminates lakes, rivers, or sewers, inform the responsible authorities according to local legislation. Prevent the contamination of drains, surface or subterranean waters, and the ground.

6.3 Methods and material for containment and cleaning up.

Contain and collect spillage with inert absorbent material (earth, sand, vermiculite, Kieselguhr...) and clean the area immediately with a suitable decontaminant.

Deposit waste in closed and suitable containers for disposal, in compliance with local and national regulations (see section 13).

6.4 Reference to other sections.

For exposure control and individual protection measures, see section 8.

For later elimination of waste, follow the recommendations under section 13.

SECTION 7: HANDLING AND STORAGE.

7.1 Precautions for safe handling.

For personal protection, see section 8.

In the application area, smoking, eating, and drinking must be prohibited.

Follow legislation on occupational health and safety.

Never use pressure to empty the containers. They are not pressure-resistant containers. Keep the product in containers made of a material identical to the original.

7.2 Conditions for safe storage, including any incompatibilities.

Store according to local legislation. Observe indications on the label. Store the containers between 5 and 25 ° C, in a dry and well-ventilated place, far from sources of heat and direct solar light. Keep far away from ignition points. Keep away from oxidising agents and from highly acidic or alkaline materials. Do not smoke. Prevent the entry of non-authorised persons. Once the containers are open, they must be carefully closed and placed vertically to prevent spills.

The product is not affected by Directive 2012/18/EU (SEVESO III).

7.3 Specific end use(s).

Not available.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION.

8.1 Control parameters.

The product does NOT contain substances with Professional Exposure Environmental Limit Values. The product does NOT contain substances with Biological Limit Values.

8.2 Exposure controls.

Measures of a technical nature:

Provide adequate ventilation, which can be achieved by using good local exhaust-ventilation and a good general exhaust system.

Concentration:	100 %			
Uses:	Different industrial uses			
	Laboratory use			
Breathing protection:				
PPE:	Particle filter mask			
Characteristics:	«CE» marking, category III. Made of filtering material, it covers nose, mouth and chin.			
CEN standards:	EN 149			
Maintenance:	Check for any tears, defects, etc. before use. Since it is disposable individual protection equipment, it should be replaced after use.			

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Observations:	Does not protect worker unless properly adjusted. Follow the manufacturer's instructions regarding suitable use of the equipment.				
Filter Type needed	d: P2				
Hand protection					
PPE:	Non-disposable protective gloves against chemicals.				
Characteristics:	«CE» marking, category III. Check the list of chemicals for which the glove has been tested.				
CEN standards:	EN 374-1, En 374-2, EN 374-3, EN 420				
Maintenance:	A schedule for the periodical replacement of gloves should be established in order to guarantee their replacement before pollutants permeate them. The use of contaminated gloves could be more dangerous than not using gloves, since the pollutant can gradually accumulate in the glove's material.				
Observations:	They are to be replaced whenever tears, cracks or deformations are observed or when exterior dirt could reduce their strength.				
Material:	PVC (polyvinyl chloride) Breakthrough time (min.): Material thickness (mm): 0,35				
Eye protection:					
PPE:	Protective goggles against particle impacts.				
Characteristics:	«CE» marking, category II. Eye protector against dust and smoke.				
CEN standards:	EN 165, EN 166, EN 167, EN 168				
Maintenance:	Visibility through lenses should be ideal. Therefore, these parts should be cleaned daily. Protectors should be disinfected periodically following the manufacturer's instructions.				
Observations:	Some signs of wear and tear include: yellow colouring of the lenses, superficial scratching of the lenses, scraping etc.				
Skin protection:					
PPE:	Chemical protective clothing				
Characteristics:	«CE» marking, category III. Clothing should fit properly. The level of protection must be set according to a test parameter called BT (Breakthrough Time), which indicates how long it takes for the chemical to pass through the material.				
CEN standards:	EN 464,EN 340, EN 943-1, EN 943-2, EN ISO 6529, EN ISO 6530, EN 13034				
Maintenance:	In order to guarantee uniform protection, follow the washing and maintenance instructions provided by the manufacturer.				
Observations:	The protective clothing's design should facilitate correct positioning, staying in place without moving for the period of use expected, bearing in mind environmental factors as well as any movement or position the user might adopt while carrying out the activity.				
PPE:	Anti-static safety footwear against chemicals.				
Characteristics:	«CE» marking, category III. Check the list of chemicals against which the footwear is resistant.				
CEN standards:	EN ISO 13287, EN 13832-1, EN 13832-2, EN 13832-3, EN ISO 20344, EN ISO 20345				
Maintenance:	For correct maintenance of this kind of safety footwear, it is necessary to observe the instructions specified by the manufacturer. The footwear should be replaced as soon as any sign of damage is observed				

The footwear should be cleaned regularly and dried when damp, although it should not be placed too

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES.

9.1 Information on basic physical and chemical properties.

Physical state: Solid Colour: Verde Odour: Odorless

Observations:

 ${\it Odour\ threshold:}\ Not\ available\ (Not\ available\ because\ there\ is\ not\ available\ test).$

Melting point: Not available (Not available because there is not available test).

Freezing point: Not applicable

Boiling point or initial boiling point and boiling range: Not available (Not available because there is not available test).

close to a source of heat in order to avoid any sharp changes in temperature.

Flammability: Non flammable

Lower explosion limit: Not available (Not available because there is not available test). Upper explosion limit: Not available (Not available because there is not available test).

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Flash point: Not applicable (No disponible porque no se dispone de ensayo).

Auto-ignition temperature: Not applicable (No disponible porque no se dispone de ensayo). Decomposition temperature: Not available (Not available because there is not available test).

pH: 6 (1%)

Kinematic viscosity: Not applicable Solubility: Soluble in water Hydrosolubility: 625 kg/m3

Liposolubility: Not available (No disponible porque no se dispone de ensayo).

Partition coefficient n-octanol/water (log value): Not available (No disponible porque no se dispone de ensayo).

Vapour pressure: 0 Absolute density: 2,07 kg/m3

Relative density: Not available (Not available because there is not available test).

Relative vapour density: Not applicable

Particle characteristics: Not available (Not available because there is not available test).

9.2 Other information

Other safety characteristics

Mechanical sensitivity:

Exothermic decomposition energy: Not available (Not available because there is not available test).

Sensitivity to impact: Not available (Not available because there is not available test). Sensitivity to friction: Not available (Not available because there is not available test).

Self-accelerating polymerisation temperature: Not available (Not available because there is not available test).

Formation of explosible dust/air mixtures:

Lower explosion limit / minimum explosible concentration: Not available (Not available because there is not available test).

Minimum ignition energy: Not available (Not available because there is not available test). Deflagration index (Kst): Not available (Not available because there is not available test). Maximum explosion pressure: Not available (Not available because there is not available test).

Acid/alkaline reserve: Not available (Not available because there is not available test).

Evaporation rate: Not available (Not available because there is not available test).

Miscibility: Not available (Not available because there is not available test).

Conductivity: Not available (Not available because there is not available test).

Corrosiveness: Not available (Not available because there is not available test).

Gas group: Not available (Not available because there is not available test).

Redox potential: Not available (Not available because there is not available test).

Radical formation potential: Not available (Not available because there is not available test). Photocatalytic properties: Not available (Not available because there is not available test).

Viscosity: Not applicable

Dropping point: Not available (Not available because there is not available test).

Blink: Not applicable

SECTION 10: STABILITY AND REACTIVITY.

10.1 Reactivity.

The product does not present hazards by their reactivity.

10.2 Chemical stability.

Stable under the recommended handling and storage conditions (see section 7).

10.3 Possibility of hazardous reactions.

The product does not present possibility of hazardous reactions.

10.4 Conditions to avoid.

Avoid any improper handling.

10.5 Incompatible materials.

Keep away from oxidising agents and from highly alkaline or acidic materials in order to prevent exothermic reactions.

10.6 Hazardous decomposition products.

No decomposition if used for the intended uses.

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SECTION 11: TOXICOLOGICAL INFORMATION.

IRRITANT MIXTURE. Its repeated or prolonged contact with the skin or mucous membranes can cause irritant symptoms such as reddening of the skin, blisters, or dermatitis. Some of the symptoms may not be immediate. They can cause allergic reactions on the skin.

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

There are no tested data available on the product.

Repeated or prolonged contact with the product can cause the elimination of oil from the skin, giving rise to non-allergic contact dermatitis and absorption of the product through the skin.

a) acute toxicity;

Product classified:

Acute toxicity (Oral), Category 4: Harmful if swallowed.

Acute Toxicity Estimate (ATE):

Substances:

ATE (Oral) = 500 mg/kg

b) skin corrosion/irritation;

Product classified:

Skin irritant, Category 2: Causes skin irritation.

c) serious eye damage/irritation;

Not conclusive data for classification.

d) respiratory or skin sensitisation;

Product classified:

Respiratory sensitiser, Category 1: May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Skin sensitiser, Category 1: May cause an allergic skin reaction.

e) germ cell mutagenicity;

Product classified:

Mutagen, Category 2: Suspected of causing genetic defects.

f) carcinogenicity;

Product classified:

Carcinogen, Category 1A: May cause cancer.

g) reproductive toxicity;

Product classified:

Reproductive toxicant, Category 1B: May damage fertility or the unborn child.

h) STOT-single exposure;

Not conclusive data for classification.

i) STOT-repeated exposure;

Product classified:

Specific target organ toxicity following a repeated exposure, Category 1: Causes damage to organs through prolonged or repeated exposure.

j) aspiration hazard;

Not conclusive data for classification.

11.2 Information on other hazards.

Endocrine disrupting properties

This product does not contain components with endocrine-disrupting properties with effects on human health.

Other information

There is no information available on other adverse health effects.

SECTION 12: ECOLOGICAL INFORMATION.

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12.1 Toxicity.

No information is available regarding the ecotoxicity.

12.2 Persistence and degradability.

No information is available regarding the biodegradability

No information is available on the degradability

No information is available about persistence and degradability of the product.

12.3 Bioaccumulative potential.

No information is available regarding the bioaccumulation.

12.4 Mobility in soil.

No information is available about the mobility in soil.

The product must not be allowed to go into sewers or waterways.

Prevent penetration into the ground.

12.5 Results of PBT and vPvB assessment.

No information is available about the results of PBT and vPvB assessment of the product.

12.6 Endocrine disrupting properties.

This product doesn't contain components with environmental endocrine disrupting properties.

12.7 Other adverse effects.

The product is not affected by the Regulation (EC) No 1005/2009 of the European Parliament and of the Council of 16 September 2009 on substances that deplete the ozone layer.

No information is available about other adverse effects for the environment.

SECTION 13: DISPOSAL CONSIDERATIONS.

13.1 Waste treatment methods.

Do not dump into sewers or waterways. Waste and empty containers must be handled and eliminated according to current, local/national legislation.

Follow the provisions of Directive 2008/98/EC regarding waste management.

SECTION 14: TRANSPORT INFORMATION.

Transport following ADR rules for road transport, RID rules for railway, ADN for inner waterways, IMDG for sea, and ICAO/IATA for air transport.

Land: Transport by road: ADR, Transport by rail: RID.

Transport documentation: Consignment note and written instructions

Sea: Transport by ship: IMDG.

Transport documentation: Bill of lading

Air: Transport by plane: ICAO/IATA.

Transport document: Airway bill.

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14.1 UN number or ID number.

UN No: UN3077

14.2 UN proper shipping name.

Description:

ADR/RID: UN 3077, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (CONTAINS NICKEL (II)SULPHATE

HEXAHYDRATE), 9, PG III, (-)

IMDG: UN 3077, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (CONTAINS NICKEL (II)SULPHATE

HEXAHYDRATE), 9, PG III, MARINE POLLUTANT

ICAO/IATA: UN 3077, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (CONTAINS NICKEL (II)SULPHATE

HEXAHYDRATE), 9, PG III

14.3 Transport hazard class(es).

Class(es): 9

14.4 Packing group.

Packing group: III

14.5 Environmental hazards.

Marine pollutant: Yes



Dangerous for the environment

Transport by ship, FEm – Emergency sheets (F – Fire, S - Spills): F-A,S-F

14.6 Special precautions for user.

Labels: 9



Hazard number: 90

Provisions concerning carriage in bulk ADR:

VC1 Carriage in bulk in sheeted vehicles, sheeted containers or sheeted bulk containers is permitted.

VC2 Carriage in bulk in closed vehicles, closed containers or closed bulk containers is permitted.

Proceed in accordance with point 6.

ADR LQ: 5 kg IMDG LQ: 5 kg ICAO LQ: 30 kg B

14.7 Maritime transport in bulk according to IMO instruments.

The product is not transported in bulk.

SECTION 15: REGULATORY INFORMATION.

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

The product is not affected by Regulation (EU) No 528/2012 concerning the making available on the market and use of biocidal products.

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The product is not affected by the procedure established Regulation (EU) No 649/2012, concerning the export and import of dangerous chemicals.

15.2 Chemical safety assessment.

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

SECTION 16: OTHER INFORMATION.

Classification codes:

Acute Tox. 4: Acute toxicity (Inhalation), Category 4
Acute Tox. 4: Acute toxicity (Oral), Category 4

Aquatic Acute 1 : Acute toxicity to the aquatic environment, Category 1 Aquatic Chronic 1 : Chronic effect to the aquatic environment, Category 1

Carc. 1A : Carcinogen, Category 1A Muta. 2 : Mutagen, Category 2

Repr. 1B : Reproductive toxicant, Category 1B Resp. Sens. 1 : Respiratory sensitiser, Category 1

STOT RE 1: Specific target organ toxicity following a repeated exposure, Category 1

Skin Irrit. 2 : Skin irritant, Category 2 Skin Sens. 1 : Skin sensitiser, Category 1

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Physical hazards On basis of test data
Health hazards Calculation method
Environmental hazards Calculation method

It is advisable to carry out basic training with regard to health and safety at work in order to handle this product correctly.

Abbreviations and acronyms used:

ADR/RID: Agreement concerning the International Carriage of Dangerous Goods by Road.

CEN: European Committee for Standardization.

PPE: Personal protection equipment.

IATA: International Air Transport Association.

ICAO: International Civil Aviation Organization.

IMDG: International Maritime Code for Dangerous Goods.

RID: Regulations Concerning the International Transport of Dangerous Goods by Rail.

Key literature references and sources for data:

http://eur-lex.europa.eu/homepage.html

http://echa.europa.eu/

Regulation (EU) 2020/878.

Regulation (EC) No 1907/2006.

Regulation (EC) No 1272/2008.

The information given in this Safety Data Sheet has been drafted in accordance with COMMISSION REGULATION (EU) 2020/878 of 18 June 2020 amending Annex II to Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemical substances and mixtures (REACH).

The information in this Safety Data Sheet on the Preparation is based on current knowledge and on current EC and national laws, as far as the working conditions of the users is beyond our knowledge and control. The product must not be used for purposes other than those that are specified without first having written instructions on how to handle. It is always the responsibility of the user to take the appropriate measures in order to comply with the requirements established by current legislation. The information contained in this Safety Sheet only states a description of the safety requirements for the preparation, and it must not be considered as a guarantee of its properties.

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