



SAFETY DATA SHEET

Nickel Sulfate Hexahydrate

Regulation on Registration, Evaluation, Authorization and Restriction of Chemicals (KKDIK) dated 23.06.2017 and numbered 30105.

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

1.1. Product identifier

Product name	Nickel sulfate hexahydrate
Formula	$\text{NiSO}_4 \cdot 6\text{H}_2\text{O}$
CAS number	10101-97-0
EC number	232-104-9

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

Use of the substance/mixture	For industry use only
Uses advised against	No additional information available

1.3. Details of the supplier of the safety data sheet

Supplier	LAPISCHEM KİMYA SAN. ve TİC. A.Ş. Yeni Mh. Aliğa Sk. Bumerang Kartal No:8 K:2 D:4 Pk:34880 Kartal- İstanbul - Türkiye + 90 216 599 07 53 + 90 216 599 07 54 info@lapischem.com www.lapischem.com
1.4. Emergency telephone number	Health Service : 112

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards	This substance does not present a physical hazard.	
Health hazards	Acute toxicity, Category 4, oral	H302
	Skin irritation, Category 2,	H315
	Skin sensitisation, Category 1	H317
	Acute toxicity, Category 4, inhalation	H332
	Respiratory sensitisation, Category 1	H334
	Germ cell mutagenicity, Category 2	H341
	Carcinogenicity, Category 1A	H350i
	Reproductive toxicity, Category 1B	H360D
	Specific Target Organ Toxicity (repeated exposure), Category 1	H372
Environmental hazards	Hazardous to the aquatic environment, Chronic Category 1	H410

2.2. Label elements

Hazard pictograms



Signal word Danger

Hazard statements	H302 Harmful if swallowed. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H332 Harmful if inhaled 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. H372 Causes damage to organs through prolonged or repeated exposure. H410 Very toxic to aquatic life with long lasting effects.
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Precautionary statements

P201 Obtain special instructions before use.
P261 Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.
P273 Avoid release to the environment.
P280 Wear protective gloves / protective clothing / eye protection / face protection.
P301+P312: IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell
P302+P352: IF ON SKIN: Wash with plenty of soap and water.
P308+P313 - IF exposed or concerned: Get medical advice/attention.
P405 Store locked up
P501 Dispose of contents/container to...

Contains

Nickel sulfate hexahydrate

2.3. Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher

3.2. Mixtures

SECTION 3: Composition/information on ingredients

Nickel sulfate hexahydrate	%100
CAS number: 10101-97-0	EC number: 232-104-9

SECTION 4: First aid measures

4.1 Description of first aid measures

General information

Get medical attention immediately. Show this Safety Data Sheet to the medical personnel.

Inhalation

Remove affected person from source of contamination. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Maintain an open airway. Loosen tight clothing such as collar, tie or belt. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. Place unconscious person on their side in the recovery position and ensure breathing can take place.

Ingestion

Rinse mouth thoroughly with water. Remove any dentures. Stop if the affected person feels sick as vomiting may be dangerous. Do not induce vomiting unless under the direction of medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Place unconscious person on their side in the recovery position and ensure breathing can take place. Maintain an open airway. Loosen tight clothing such as collar, tie or belt.

Skin contact

Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and wash using soap. Get medical attention immediately.

Eye contact

Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes.

Protection of first aiders

First aid personnel should wear appropriate protective equipment during any rescue. Wash contaminated clothing thoroughly with water before removing it from the affected person, or wear gloves. It may be dangerous for first aid personnel to carry out mouth-to-mouth resuscitation.



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

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

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

Notes for the doctor

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media The product is not flammable. Carbon dioxide, dry powder or waterfog. Use fire-extinguishing media suitable for the surrounding fire.

Unsuitable extinguishing media Do not use direct water jet

5.2. Special hazards arising from the substance or mixture

Specific hazards This material is harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain
In case of fire, toxic gases may be formed.

5.3. Advice for firefighters

Protective actions during firefighting Avoid breathing fire gases or vapours. Evacuate area. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Cool containers exposed to flames with water until well after the fire is out. Avoid discharge to the aquatic environment. Control run-off water by containing and keeping it out of sewers and watercourses. If risk of water pollution occurs, notify appropriate authorities.

Special protective equipment for firefighters

Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. Firefighter's clothing conforming to European standard EN469 (including helmets, protective boots and gloves) will provide a basic level of protection for chemical incidents.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions No action shall be taken without appropriate training or involving any personal risk. Keep unnecessary and unprotected personnel away from the spillage. Wear protective clothing as described in Section 8 of this safety data sheet. Follow precautions for safe handling described in this safety data sheet. Wash thoroughly after dealing with a spillage. Ensure procedures and training for emergency decontamination and disposal are in place. Do not touch or walk into spilled material.



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6.2. Environmental precautions

Environmental precautions Avoid discharge into drains or watercourses or onto the ground. Avoid discharge to the aquatic environment. Large Spillages: Inform the relevant authorities if environmental pollution occurs (sewers, waterways, soil or air).

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Wear protective clothing as described in Section 8 of this safety data sheet. Clear up spills immediately and dispose of waste safely. Provide adequate ventilation. Approach the spillage from upwind. Collect spillage with a shovel and broom, or similar and reuse, if possible. Collect and place in suitable waste disposal containers and seal securely. Flush contaminated area with plenty of water. Wash thoroughly after dealing with a spillage. Caution. Dangerous for the environment. Do not empty into drains. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

6.4. Reference to other sections

Reference to other sections For personal protection, see Section 8. See Section 11 for additional information on health hazards. See Section 12 for additional information on ecological hazards. For waste disposal, see Section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Read and follow manufacturer's recommendations. Wear protective clothing as described in Section 8 of this safety data sheet. Keep away from food, drink and animal feeding stuffs. Keep container tightly sealed when not in use. Avoid discharge to the aquatic environment. Do not handle until all safety precautions have been read and understood. Do not handle broken packages without protective equipment. Do not reuse empty containers.

Advice on general occupational hygiene

Wash promptly if skin becomes contaminated. Take off contaminated clothing. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Wash at the end of each workshift and before eating, smoking and using the toilet. Change work clothing daily before leaving workplace.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Store in accordance with local regulations. Keep only in the original container. Keep container tightly closed, in a cool, well ventilated place. Keep containers upright. Protect containers from damage. Bund storage facilities to prevent soil and water pollution in the event of spillage. The storage area floor should be leak-tight, jointless and not absorbent

Pharmaceuticals, foods, and animal feeds including additives. Infectious, radioactive and explosive substances. Gases. Other explosive substances of storage class 4.1A. Strongly oxidizing substances of storage class 5.1A. Ammonium nitrate and preparations containing ammonium nitrate. Organic peroxides and self reactive substances.

Storage class Storage class 6.1 D (Not combustible, acutely toxic Cat. 3 or chronic effecting substances)

7.3. Specific end use(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.2.



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SECTION 8: Exposure controls/Personal protection

8.1. Control parameters

Component	Eksposure Limitst	Basis	Entity
Nickel Sulfate, Hexahydrate	0.1 mg/m3	TLV	ACGIH

8.2. Exposure controls

Protective equipment



Appropriate engineering controls

Provide adequate ventilation. Personal, workplace environment or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Use process enclosures, local exhaust ventilation or other engineering controls as the primary means to minimise worker exposure. Personal protective equipment should only be used if worker exposure cannot be controlled adequately by the engineering control measures. Ensure control measures are regularly inspected and maintained. Ensure operatives are trained to minimise exposure.

Eye/face protection

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. Personal protective equipment for eye and face protection should comply with European Standard EN166. Wear tight-fitting, chemical splash goggles or face shield. If inhalation hazards exist, a full-face respirator may be required instead.

Hand protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. To protect hands from chemicals, gloves should comply with European Standard EN374. Considering the data specified by the glove manufacturer, check during use that the gloves are retaining their protective properties and change them as soon as any deterioration is detected. Frequent changes are recommended.

Other skin and body protection

Appropriate footwear and additional protective clothing complying with an approved standard should be worn if a risk assessment indicates skin contamination is possible.

Hygiene measures

Provide eyewash station and safety shower. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Clean equipment and the work area every day. Good personal hygiene procedures should be implemented. Wash at the end of each work shift and before eating, smoking and using the toilet. When using do not eat, drink or smoke. Preventive industrial medical examinations should be carried out. Warn cleaning personnel of any hazardous properties of the product.

Respiratory protection

Respiratory protection complying with an approved standard should be worn if a risk assessment indicates inhalation of contaminants is possible. Ensure all respiratory protective equipment is suitable for its intended use and is 'CE'-marked. Check that the respirator fits tightly and the filter is changed regularly. Gas and combination filter cartridges should comply with European Standard EN14387. Full face mask respirators with replaceable filter cartridges should comply with European Standard EN136. Half mask and quarter mask respirators with replaceable filter cartridges should comply with European Standard EN140.

Environmental exposure controls

Keep container tightly sealed when not in use. Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels. Store in a demarcated bunded area to prevent release to drains and/or watercourses



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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Crystals
Colour	Blue-green
Odour	No data available
Odour threshold	No data available
pH	No data available
Melting point	No data available
Initial boiling point and range	No data available.
Flash point	No data available.
Evaporation rate	No data available.
Density	2.07 g/cm ³ .
Flammability (solid)	Not flammable.
Solubility(ies)	Freely soluble in water.
Viscosity	No data available.
Explosive properties	No data available.

9.2. Other information

Other information	No information required
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SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	There are no known reactivity hazards associated with this product.
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10.2. Chemical stability

Stability	Stable at normal ambient temperatures and when used as recommended. Stable under the prescribed storage conditions.
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10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	No potentially hazardous reactions known.
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10.4. Conditions to avoid

Conditions to avoid	No data available
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10.5. Incompatible materials

Materials to avoid	Strong oxidizing agents
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10.6. Hazardous decomposition products

Nickel/nickel oxides, sulfur oxides



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SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

LD50 Oral –

Rat - LD50: 361 mg/kg
(OECD Test Guideline 401)

Inhalation: LD50: 1,6mg/lit (4h)

Dermal: No data available

Skin corrosion/irritation

Skin - In vitro study No data available

Result: No data available

Serious eye damage/eye irritation

Eyes - No data available

Result: No data available

Respiratory or skin sensitization

Patch test: - Guinea pig May cause allergic skin reaction.

Germ cell mutagenicity

Suspected of causing genetic defects.

Test Type: No data available

Test system: No data available

Metabolic activation: No data available

Method: No data available

Result: No data available

Carcinogenicity

IARC 1 - Group 1: Carcinogenic to humans (nickel sulfate).

Reproductive toxicity Presumed human reproductive toxicant May damage the unborn child

Specific target organ toxicity – single exposure

No data available

Specific target organ toxicity – repeated exposure

Inhalation - Causes damage to organs through prolonged or repeated exposure



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11.2 Additional Information

No data available

SECTION 12: Ecological Information

12.1. Toxicity

Toxicity Very toxic to aquatic life with long lasting effects, Category 1, H410

Test: Crustaceans

Duration: 48 hr

2,72 mg/l LC50

Test: Fish

Duration: 96 hr

14,7 mg/l LC50

Test: Algae

Duration: 96 hr

18,4 mg/l EC50

12.2. Persistence and degradability

Persistence and degradability Contains an ingredient that may be persistent in aquatic environment

12.3. Bioaccumulative potential

Bioaccumulative potential No data available on bioaccumulation.

12.4. Mobility

Mobility No data available

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.



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SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information

The generation of waste should be minimised or avoided wherever possible. Reuse or recycle products wherever possible. This material and its container must be disposed of in a safe way. Disposal of this product, process solutions, residues and by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any local authority requirements. When handling waste, the safety precautions applying to handling of the product should be considered. Care should be taken when handling emptied containers that have not been thoroughly cleaned or rinsed out. Empty containers or liners may retain some product residues and hence be potentially hazardous.

Disposal methods

Dispose of surplus products and those that cannot be recycled via a licensed waste disposal contractor. Waste, residues, empty containers, discarded work clothes and contaminated cleaning materials should be collected in designated containers, labelled with their contents. Incineration or landfill should only be considered when recycling is not feasible.

SECTION 14: Transport information

14.1. UN number

UN No. (ADR/RID)	3077
UN No. (IMDG)	3077
UN No. (ICAO)	3077
UN No. (ADN)	3077

14.2. UN proper shipping name

Proper shipping name (ADR/RID)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (NICKEL SULFATE HEXAHYDRATE)
Proper shipping name (IMDG)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (NICKEL SULFATE HEXAHYDRATE)
Proper shipping name (ICAO)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (NICKEL SULFATE HEXAHYDRATE)
Proper shipping name (ADN)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (NICKEL SULFATE HEXAHYDRATE)

Transport hazard class(es)

ADR/RID class	9
ADR/RID classification code	M7
ADR/RID label	9
IMDG class	9
ICAO class/division	9
ADN class	9



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14.3. Packing group

ADR/RID packing group	III
IMDG packing group	III
ICAO packing group	III
ADN packing group	III

14.4. Environmental hazards

Environmentally hazardous substance/marine pollutant

Yes

14.5. Special precautions for user

Always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

EmS	F-A, S-F
Emergency Action Code	-
Hazard Identification Number (ADR/RID)	90
Tunnel restriction code	(-)

14.6. Transport in bulk according to Annex II of MARPOL and the IBC Code

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not applicable.
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SECTION 15: Regulatory information

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

National regulations	23.06.2017 tarih ve 30105 sayılı Kimyasalların Kaydı, Değerlendirilmesi, İzni ve Kısıtlanması Hakkında Yönetmelik (KKDİK) 11.12.2013 tarihli ve 28848 sayılı Maddelerin ve Karışımların Sınıflandırılması, Etiketlenmesi ve Ambalajlanması Hakkında Yönetmelik (SEA). 18.06.2022 tarihli ve 31870 sayılı Tehlikeli Maddelerin Karayolunda Taşınmasına Dair Yönetmelik. T.C. Çalışma ve Sosyal Güvenlik Bakanlığı, 12 Ağustos 2013 tarihli, 28733 sayılı, Kimyasal Maddelerle Çalışmalarda Sağlık ve Güvenlik Önlemleri Hakkında Yönetmelik. T.C. Çalışma ve Sosyal Güvenlik Bakanlığı, 2 Temmuz 2013 tarihli, 28695 sayılı, Kişisel Koruyucu Donanımların İşyerlerinde Kullanılması Hakkında Yönetmelik. T.C. Çalışma ve Sosyal Güvenlik Bakanlığı, 30 Haziran 2012 tarihli, 6331 sayılı, İş Sağlığı ve Güvenliği Kanunu.
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EU legislation

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended).
Commission Regulation (EU) No 453/2010 of 20 May 2010.
Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended).
Dangerous Substances Directive 67/548/EEC.

SECTION 16: Other information

Full text of H-Statements referred to under sections 2 and 3.

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

H302 Harmful if swallowed.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H332 Harmful if inhaled
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.
H372 Causes damage to organs through prolonged or repeated exposure.
H410 Very toxic to aquatic life with long lasting effects.

Issued by

Chemical Assessment Specialist: Bora Şen
Effective Date: November 25, 2025
Certificate No & Date: TÜV / 11.49.03 & 2 November 2025
Email: bora@smartchem.com.tr

Date

01/05/2025

SDS number

9033

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