

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 01.16.2018

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Nickel Nitrate, Hexahydrate,

SECTION 1: Identification

Product identifier

Product name: Nickel Nitrate, Hexahydrate,

Product code: S25443

Recommended use of the product and restriction on use

Relevant identified uses: Not determined or not applicable.

Uses advised against: Not determined or not applicable.

Reasons why uses advised against: Not determined or not applicable.

Manufacturer or supplier details

Manufacturer:

Supplier:

AquaPhoenix Scientific

860 Gitts Run Road

Hanover

PA 17331

(717) 632-1291

Fisher Science Education

6771 Silver Crest Road

Nazareth

PA 18064

800 955-1177

Emergency telephone number:

United States

Emergency Telephone No.: 800-255-3924

SECTION 2: Hazard(s) identification

GHS classification:

Oxidizing solids, category 2

Acute toxicity (oral), category 4

Acute toxicity (inhalation), category 4

Skin irritation, category 2

Serious eye damage, category 1

Respiratory sensitization, category 1

Skin sensitization, category 1

Germ cell mutagenicity, category 2

Carcinogenicity, category 1A

Reproductive toxicity, category 1B

Specific target organ toxicity - repeated exposure, category 1

Acute aquatic hazard, category 1

Chronic aquatic hazard, category 1

Label elements

Hazard pictograms:



Signal word: Danger

Hazard statements:

H272 May intensify fire; oxidizer

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- H302 Harmful if swallowed
- H332 Harmful if inhaled
- H315 Causes skin irritation
- H318 Causes serious eye damage
- H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled
- H317 May cause an allergic skin reaction
- 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
- H400 Very toxic to aquatic life
- H410 Very toxic to aquatic life with long lasting effects

Precautionary statements:

- P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking
- P220 Keep/Store away from clothing/combustible materials
- P221 Take any precaution to avoid mixing with combustibles
- P280 Wear protective gloves/protective clothing/eye protection/face protection
- P264 Wash skin thoroughly after handling
- P270 Do not eat, drink or smoke when using this product
- P271 Use only outdoors or in a well-ventilated area
- P285 In case of inadequate ventilation wear respiratory protection
- P272 Contaminated work clothing should not be allowed out of the workplace
- P201 Obtain special instructions before use
- P202 Do not handle until all safety precautions have been read and understood
- P260 Do not breathe dust/fume/gas/mist/vapors/spray
- P273 Avoid release to the environment
- P370+P378 In case of fire: Use agents recommended in section 5 for extinction
- P301+P330+P312 IF SWALLOWED: Rinse mouth. Call a POISON CENTER or doctor/physician if you feel unwell.
- P304+P340+P312 If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a poison center or doctor/physician if you feel unwell
- P321 Specific treatment (see supplemental first aid instructions on this label).
- P362 Take off contaminated clothing and wash before reuse
- P302+P352 If on skin: Wash with soap and water
- P305+P351+P338+P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.
- P333+P313 If skin irritation or a rash occurs: Get medical advice/attention
- P308+P313 If exposed or concerned: Get medical advice/attention
- P391 Collect spillage
- P405 Store locked up
- P501 Dispose of contents and container as instructed in Section 13

Hazards not otherwise classified: None

SECTION 3: Composition/information on ingredients

Identification	Name	Weight %
CAS number: 13478-00-7	Nickel nitrate hexahydrate	100

Additional Information: None

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SECTION 4: First aid measures

Description of first aid measures

General notes:

Not determined or not applicable.

After inhalation:

Loosen clothing as necessary and position individual in a comfortable position

Maintain an unobstructed airway

Get medical advice/attention if you feel unwell

Move to fresh air

Call a POISON CONTROL CENTER or seek medical attention if you feel unwell

After skin contact:

Rinse affected area with soap and water

If symptoms develop or persist, seek medical attention

Wash affected area with soap and water

Seek medical attention if symptoms develop or persist

After eye contact:

Rinse/flush exposed eye(s) gently using water for 15-20 minutes

If symptoms develop or persist, seek medical attention

Remove contact lens(es) if able to do so during rinsing

Immediately call a POISON CONTROL CENTER or seek medical attention

After swallowing:

Rinse mouth thoroughly

Seek medical attention if irritation, discomfort, or vomiting persists

Call a POISON CONTROL CENTER or seek medical attention if you feel unwell

Do not induce vomiting

Rinse mouth and then drink plenty of water

Most important symptoms and effects, both acute and delayed

Acute symptoms and effects:

Not determined or not applicable.

Delayed symptoms and effects:

Not determined or not applicable.

Immediate medical attention and special treatment

Specific treatment:

Not determined or not applicable.

Notes for the doctor:

Not determined or not applicable.

SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing media:

Use appropriate fire suppression agents for adjacent combustible materials or sources of ignition

Unsuitable extinguishing media:

Not determined or not applicable.

Specific hazards during fire-fighting:

Thermal decomposition can lead to release of irritating gases and vapors

Will release oxygen when heated, intensifying a fire

Special protective equipment for firefighters:

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Use typical firefighting equipment, self-contained breathing apparatus, special tightly sealed suit

Special precautions:

Carbon monoxide and carbon dioxide may form upon combustion
Heating causes a rise in pressure, risk of bursting and combustion

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Ensure adequate ventilation
Ensure air handling systems are operational
Wear protective eye wear, gloves and clothing

Environmental precautions:

Should not be released into the environment
Prevent from reaching drains, sewer or waterway

Methods and material for containment and cleaning up:

Wear protective eye wear, gloves and clothing
Sweep or scoop up solid material while minimizing dust generation
Dispose of contents / container in accordance with local regulations

Reference to other sections:

Not determined or not applicable.

SECTION 7: Handling and storage

Precautions for safe handling:

Use only with adequate ventilation.
Avoid breathing dust.
Do not eat, drink, smoke or use personal products when handling chemical substances.

Conditions for safe storage, including any incompatibilities:

Keep container tightly sealed.
Keep container dry.
Store in a cool, well-ventilated area.
Store away from flammable and combustible materials (paper, wood).
Store away from reducing agents (zinc, alkaline metals, formic acid).

SECTION 8: Exposure controls/personal protection

Only those substances with limit values have been included below.

Occupational Exposure limit values:

Country (Legal Basis)	Substance	Identifier	Permissible concentration
United States (OSHA)	Nickel nitrate hexahydrate	13478-00-7	OSHA PEL 1 mg/m ³ , as Ni
ACGIH	Nickel nitrate hexahydrate	13478-00-7	ACGIH TLV 0.1 mg/m ³ , inhalable fraction, as Ni

Biological limit values:

No biological exposure limits noted for the ingredient(s).

Information on monitoring procedures:

Monitoring of the concentration of substances in the breathing zone of workers or in the general workplace may be required to confirm compliance with an OEL and adequacy of exposure controls.
Biological monitoring may also be appropriate for some substances.

Appropriate engineering controls:

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Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use or handling.

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapor and mists below the applicable workplace exposure limits (Occupational Exposure Limits-OELs) indicated above.

Personal protection equipment

Eye and face protection:

Safety goggles or glasses, or appropriate eye protection.

Skin and body protection:

Select glove material impermeable and resistant to the substance.

Wear appropriate clothing to prevent any possibility of skin contact.

Respiratory protection:

If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn.

General hygienic measures:

Avoid contact with skin, eyes and clothing.

Wash hands before breaks and at the end of work.

Wash contaminated clothing before reuse.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance	Dark green crystalline solid
Odor	Characterisitic odor
Odor threshold	Not determined or not available.
pH	4.0
Melting point/freezing point	56°C (133°F) - lit.
Initial boiling point/range	137°C (278.60°F)
Flash point (closed cup)	Not determined or not available.
Evaporation rate	Not determined or not available.
Flammability (solid, gas)	Not determined or not available.
Upper flammability/explosive limit	Not determined or not available.
Lower flammability/explosive limit	Not determined or not available.
Vapor pressure	Not determined or not available.
Vapor density	10.0 (Air = 1)
Density	Not determined or not available.
Relative density	2.05 g/cm ³ at 25°C (77°F)
Solubilities	Insoluble.
Partition coefficient (n-octanol/water)	Not determined or not available.
Auto/Self-ignition temperature	Not determined or not available.
Decomposition temperature	Not determined or not available.
Dynamic viscosity	Not determined or not available.
Kinematic viscosity	Not determined or not available.
Explosive properties	Not determined or not available.
Oxidizing properties	Not determined or not available.

Other information

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SECTION 10: Stability and reactivity

Reactivity:

Does not react under normal conditions of use and storage.

Chemical stability:

Stable under normal conditions of use and storage.

Possibility of hazardous reactions:

None under normal conditions of use and storage.

Conditions to avoid:

Incompatible materials.

Incompatible materials:

Organic materials, Powdered metals, Strong reducing agents, acids.

Hazardous decomposition products:

None known.

SECTION 11: Toxicological information

Acute toxicity

Assessment: Harmful if swallowed Harmful if inhaled

Product data: No data available.

Substance data:

Name	Route	Result
Nickel nitrate hexahydrate	oral	LD50 - Rat - 1620 mg/kg

Skin corrosion/irritation

Assessment: Causes skin irritation

Product data: No data available.

Substance data:

Name	Result
Nickel nitrate hexahydrate	Causes skin irritation.

Serious eye damage/irritation

Assessment: Causes serious eye damage

Product data: No data available.

Substance data:

Name	Result
Nickel nitrate hexahydrate	Causes serious eye damage.

Respiratory or skin sensitization

Assessment: May cause allergy or asthma symptoms or breathing difficulties if inhaled May cause an allergic skin reaction

Product data: No data available.

Substance data:

Name	Result
Nickel nitrate hexahydrate	May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction.

Carcinogenicity

Assessment: May cause cancer

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Product data: No data available.

Substance data:

Name	Species	Result
Nickel nitrate hexahydrate	Nickel Nitrate,Hexahydrate	May cause cancer.

International Agency for Research on Cancer (IARC): None of the ingredients are listed.

National Toxicology Program (NTP): None of the ingredients are listed.

Germ cell mutagenicity

Assessment: Suspected of causing genetic defects

Product data: No data available.

Substance data:

Name	Result
Nickel nitrate hexahydrate	Suspected of causing genetic defects.

Reproductive toxicity

Assessment: May damage fertility or the unborn child

Product data: No data available.

Substance data:

Name	Result
Nickel nitrate hexahydrate	May damage fertility or the unborn child.

Specific target organ toxicity (single exposure)

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data:

Name	Result
Nickel nitrate hexahydrate	Causes damage to organs through prolonged or repeated exposure.

Specific target organ toxicity (repeated exposure)

Assessment: Causes damage to organs through prolonged or repeated exposure

Product data: No data available.

Substance data: No data available.

Aspiration toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

Information on likely routes of exposure: No data available.

Symptoms related to the physical, chemical and toxicological characteristics: No data available.

Other information: No data available.

SECTION 12: Ecological information

Acute (short-term) toxicity

Assessment: Very toxic to aquatic life

Product data: No data available.

Substance data: No data available.

Chronic (long-term) toxicity

Product data: No data available.

Substance data: No data available.

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Persistence and degradability

Product data: No data available.

Substance data: No data available.

Bioaccumulative potential

Product data: No data available.

Substance data: No data available.

Mobility in soil

Product data: No data available.

Substance data: No data available.

Other adverse effects: No data available.



SECTION 13: Disposal considerations

Disposal methods:



It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities

SECTION 14: Transport information



United States Transportation of dangerous goods (49 CFR DOT)

UN number	UN2725
UN proper shipping name	Nickel nitrate
UN transport hazard class(es)	5.1  
Packing group	III
Environmental hazards	Marine Pollutant
Special precautions for user	None

International Maritime Dangerous Goods (IMDG)

UN number	UN2725
UN proper shipping name	Nickel nitrate
UN transport hazard class(es)	5.1  
Packing group	III
Environmental hazards	Marine Pollutant
Special precautions for user	None

International Air Transport Association Dangerous Goods Regulations (IATA-DGR)

UN number	UN2725
UN proper shipping name	Nickel nitrate
UN transport hazard class(es)	5.1  
Packing group	III

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Environmental hazards	Marine Pollutant
Special precautions for user	None

SECTION 15: Regulatory information

United States regulations

Inventory listing (TSCA):

13478-00-7	Nickel nitrate hexahydrate	Not Listed
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Significant New Use Rule (TSCA Section 5): Not determined.

Export notification under TSCA Section 12(b): Not determined.

SARA Section 311/312 hazards:

Acute	Chronic	Fire	Pressure	Reactive
No	No	No	No	No

SARA Section 302 extremely hazardous substances: Not determined.

SARA Section 313 toxic chemicals:

13478-00-7	Nickel nitrate hexahydrate	Not Listed
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CERCLA: Not determined.

RCRA: Not determined.

Section 112(r) of the Clean Air Act (CAA): Not determined.

Massachusetts Right to Know:

13478-00-7	Nickel nitrate hexahydrate	Listed
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New Jersey Right to Know:

13478-00-7	Nickel nitrate hexahydrate	Listed
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New York Right to Know:

13478-00-7	Nickel nitrate hexahydrate	Listed
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Pennsylvania Right to Know:

13478-00-7	Nickel nitrate hexahydrate	Listed
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California Proposition 65: None of the ingredients are listed.

SECTION 16: Other information

Abbreviations and Acronyms: None

Disclaimer:

This product has been classified in accordance with OSHA HCS 2012 guidelines. The information provided in this SDS is correct, to the best of our knowledge, based on information available. The information given is designed only as a guidance for safe handling, use, storage, transportation and disposal and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials, unless specified in the text. The responsibility to provide a safe workplace remains with the user.

NFPA: 3-0-2-ox

HMIS: 3-0-2-X

Initial preparation date: 01.16.2018

End of Safety Data Sheet