

Safety Data Sheet

according to 29CFR1910/1200 and GHS Rev. 3

Effective date : 12.19.2014

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Nickel Sulfate, ACS

SECTION 1: Identification of the substance/mixture and of the supplier

Product name: Nickel Sulfate, ACS

Manufacturer/Supplier Trade name:

Manufacturer/Supplier Article number: S25445A

Recommended uses of the product and restrictions on use:

Manufacturer Details:

AquaPhoenix Scientific, Inc
9 Barnhart Drive, Hanover, PA 17331
(717) 632-1291

Supplier Details:

Fisher Science Education
6771 Silver Crest Road, Nazareth, PA 18064
(724)517-1954

Emergency telephone number:

Fisher Science Education
Emergency Telephone No.: 800-535-5053

SECTION 2: Hazards identification

Classification of the substance or mixture:



Health hazard



Irritant



Environmentally Damaging

AcTox Oral 4.
Carcin. 1A.
Skin Irrit. 2.
Reprod Tox. 1B.
Specific Target. Organ tox. 1.
Aquatic AcTox. 1.
Aquatic ChrTox. 1.
Resp. Sens. 1.
Skin Sens. 1.
AcTox Inhaln. 4.
Germ cell Muta. 2.

Signal word: Danger

Hazard statements:

Harmful if swallowed.
Harmful if inhaled.
May cause allergy or asthma symptoms or breathing difficulties if inhaled.

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May cause an allergic skin reaction.
May cause cancer.
Causes skin irritation.
Suspected of causing genetic defects.
May damage fertility or the unborn child.
Causes damage to organs through prolonged or repeated exposure.
Very toxic to aquatic life with long lasting effects.

Precautionary statements:

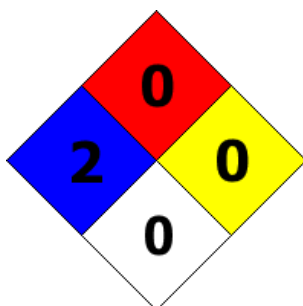
If medical advice is needed, have product container or label at hand.
Keep out of reach of children.
Read label before use.
Contaminated work clothing should not be allowed out of the workplace.
Do not eat, drink or smoke when using this product.
Use only outdoors or in a well-ventilated area.
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Do not breathe dust/fume/gas/mist/vapours/spray.
Wash skin thoroughly after handling.
Wear protective gloves/protective clothing/eye protection/face protection.
Avoid release to the environment.
IF exposed or concerned: Get medical advice/attention.
Collect spillage.
Rinse mouth.
Specific treatment (see supplemental first aid instructions on this label).
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
IF ON SKIN: Wash with soap and water.
Take off contaminated clothing and wash before reuse.
If skin irritation or a rash occurs: Get medical advice/attention.
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
Store locked up.
Dispose of contents and container as instructed in Section 13.

Other Non-GHS Classification:

WHMIS



NFPA/HMIS



NFPA SCALE (0-4)

Health	2
Flammability	0
Physical Hazard	0
Personal Protection	X

HMIS RATINGS (0-4)

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SECTION 3: Composition/information on ingredients

Ingredients:		
CAS 10101-97-0	Nickel Sulfate	<14 %
Percentages are by weight		

SECTION 4: First aid measures

Description of first aid measures

After inhalation:

Loosen clothing as necessary and position individual in a comfortable position. Remove to fresh air. Give artificial respiration if necessary. If breathing is difficult give oxygen. Seek medical attention if irritation persists or if concerned.

After skin contact:

Wash hands and exposed skin with soap and plenty of water. Seek medical attention if irritation persists or if concerned.

After eye contact:

Protect unexposed eye. Rinse or flush exposed eye gently using water for 15-20 minutes. Remove contact lenses while rinsing. Occasionally lift the upper and lower eyelids while rinsing. Immediately get medical assistance.

After swallowing:

Induce vomiting. Dilute with water or milk. Get medical assistance.

Most important symptoms and effects, both acute and delayed:

Irritation. Nausea. Headache. Shortness of breath.

Indication of any immediate medical attention and special treatment needed:

If seeking medical attention, provide SDS document to physician.

SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing agents:

If in laboratory setting, follow laboratory fire suppression procedures. Use appropriate fire suppression agents for adjacent combustible materials or sources of ignition.

Unsuitable extinguishing agents:

Strong acids.

Special hazards arising from the substance or mixture:

Avoid generating dust.

Advice for firefighters:

Protective equipment:

Wear protective eyewear, gloves, and clothing.

Additional information (precautions):

Move product containers away from fire or keep cool with water spray as a protective measure. Avoid contact with skin, eyes, and clothing.

SECTION 6: Accidental release measures

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Personal precautions, protective equipment and emergency procedures:

Use spark-proof tools and explosion-proof equipment. Ensure adequate ventilation. Keep away from ignition sources.

Environmental precautions:

Should not be released into environment. Prevent from reaching drains, sewer, or waterway. Collect contaminated soil for characterization per Section 13.

Methods and material for containment and cleaning up:

Collect liquids using vacuum or by use of absorbents. Place into properly labeled containers for recovery or disposal. Place in container for disposal according to local regulations (see section 13). If necessary use trained response staff or contractor.

Reference to other sections: None

SECTION 7: Handling and storage

Precautions for safe handling:

Wash hands and exposed skin with soap and plenty of water. Dust deposits should not be allowed to accumulate on surfaces. Do not inhale gases, fumes, dust, mist, vapor, and aerosols. Do not eat, drink, smoke, or use personal products when handling chemical substances. Follow Chemical Hygiene Plan. Use only in well ventilated areas. Avoid contact with eyes, skin, and clothing.

Conditions for safe storage, including any incompatibilities:

Keep away from food, beverages, and feed sources. Protect from freezing and physical damage. Keep product and empty container away from heat and sources of ignition. Store with like hazards. Keep container tightly closed in a cool, dry, and well-ventilated area.

SECTION 8: Exposure controls/personal protection



Control Parameters:

No applicable occupational exposure limits.

Appropriate Engineering controls:

It is recommended that all dust control equipment such as local exhaust ventilation and material transport systems involved in handling of this product contain explosion relief vents or an explosion suppression system or an oxygen deficient environment. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use or handling. Normal ventilation is adequate. 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.

Respiratory protection:

Not required under normal conditions of use. Use suitable respiratory protective device when high concentrations are present.

Protection of skin:

Select glove material impermeable and resistant to the substance. Select glove material based on rates of diffusion and degradation. Wear protective clothing.

Eye protection:

Safety glasses with side shields or goggles.

General hygienic measures:

Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash hands before breaks and at the end of work. Wash hands and exposed skin with soap and plenty of water. Remove contaminated clothing and shoes. Before wearing wash contaminated clothing.

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SECTION 9: Physical and chemical properties

Appearance (physical state, color):	Clear green liquid	Explosion limit lower:	Non Explosive
		Explosion limit upper:	Non Explosive
Odor:	Odorless	Vapor pressure at 20°C:	Negligible
Odor threshold:	Not Applicable	Vapor density:	Not Available
pH-value:	4-5	Relative density:	1.30 g/cm ³
Melting/Freezing point:	Not Available	Solubilities:	Soluble.
Boiling point/Boiling range:	Not Available	Partition coefficient (n-octanol/water):	No Information
Flash point (closed cup):	Not Applicable	Auto/Self-ignition temperature:	No Information
Evaporation rate:	Not Available	Decomposition temperature:	Not Applicable
Flammability (solid, gaseous):	No Information	Viscosity:	a. Kinematic: Not Applicable b. Dynamic: Not Applicable
Density at 20°C:	No Information		

SECTION 10: Stability and reactivity

Reactivity: None

Chemical stability:

Stable under normal conditions.

Possible hazardous reactions: None

Conditions to avoid:

Dust generation.

Incompatible materials:

Strong acids.

Hazardous decomposition products:

Sulphur oxides. Nickel oxide.

SECTION 11: Toxicological information

Acute Toxicity:

Oral:

APS LD50 orl-rat: 264 mg/kg(Nickel sulfate)

Chronic Toxicity: No additional information.

Corrosion Irritation: No additional information.

Sensitization: No additional information.

Numerical Measures: No additional information.

Carcinogenicity:

Nickel(II) sulfate hexahydrate: Human carcinogen. May cause cancer by inhalation.

Mutagenicity:

In vitro tests showed mutagenic effects. Please refer to RTECS QR9600000 for mutation data and references.

Reproductive Toxicity: No additional information.

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SECTION 12: Ecological information

Ecotoxicity: No additional information.

Persistence and degradability:

Readily degradable in the environment.

Bioaccumulative potential: No additional information.

Mobility in soil:

Nickel is very mobile in aquatic environment and shows potential for bio-accumulation.

Other adverse effects: No additional information.

SECTION 13: Disposal considerations

Waste disposal recommendations:

Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Offer surplus and non-recyclable solutions to a licensed disposal company. It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities (US 40CFR262.11). Consult federal, state, provincial, and local regulations regarding the proper disposal of waste material that may incorporate some amount of this product.

SECTION 14: Transport information

US DOT

UN Number:

ADR, ADN, DOT, IMDG, IATA

3077

Limited Quantity Exception:

None

Bulk:

RQ (if applicable): None

Proper shipping Name: Environmentally hazardous substances, liquid , n.o.s. (Nickel sulfate hexahydrate).

Hazard Class: 9

Packing Group: III.

Marine Pollutant (if applicable): No additional information.

Comments: None

Non Bulk:

RQ (if applicable): None

Proper shipping Name: Environmentally hazardous substances, liquid , n.o.s. (Nickel sulfate hexahydrate).

Hazard Class: 9

Packing Group: III.

Marine Pollutant (if applicable): No additional information.

Comments: None



SECTION 15: Regulatory information

United States (USA)

SARA Section 311/312 (Specific toxic chemical listings):

None of the ingredients are listed.

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SARA Section 313 (Specific toxic chemical listings):

None of the ingredients are listed.

RCRA (hazardous waste code):

10101-97-0 Not applicable.

TSCA (Toxic Substances Control Act):

10101-97-0 Not applicable.

CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act):

10101-97-0 Nickel Sulfate 100.

Proposition 65 (California):

Chemicals known to cause cancer:

None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for females:

None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for males:

None of the ingredients are listed.

Chemicals known to cause developmental toxicity:

None of the ingredients are listed.

Canada

Canadian Domestic Substances List (DSL):

10101-97-0 Not applicable.

Canadian NPRI Ingredient Disclosure list (limit 0.1%):

None of the ingredients are listed.

Canadian NPRI Ingredient Disclosure list (limit 1%):

None of the ingredients are listed.

SECTION 16: Other information

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations. Note. The responsibility to provide a safe workplace remains with the user. The user should consider the health hazards and safety information contained herein as a guide and should take those precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment. The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by the use of this material. It is the responsibility of the user to comply with all applicable laws and regulations applicable to this material.

GHS Full Text Phrases: None

Abbreviations and Acronyms:

IMDG International Maritime Code for Dangerous Goods.

PNEC Predicted No-Effect Concentration (REACH).

CFR Code of Federal Regulations (USA).

SARA Superfund Amendments and Reauthorization Act (USA).

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RCRA Resource Conservation and Recovery Act (USA).
TSCA Toxic Substances Control Act (USA).
NPRI National Pollutant Release Inventory (Canada).
DOT US Department of Transportation.
IATA International Air Transport Association.
GHS Globally Harmonized System of Classification and Labelling of Chemicals.
ACGIH American Conference of Governmental Industrial Hygienists.
CAS Chemical Abstracts Service (division of the American Chemical Society).
NFPA National Fire Protection Association (USA).
HMIS Hazardous Materials Identification System (USA).
WHMIS Workplace Hazardous Materials Information System (Canada).
DNEL Derived No-Effect Level (REACH).

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Last updated: 07.02.2015