

1. CHEMICAL IDENTIFICATION AND COMPANY INFORMATION

PRODUCT NAME: Nickel Sulfate, Hexahydrate, ACS Reagent

PRODUCT NUMBER: N458

COMPANY INFO: PhytoTech Labs Inc.
14610 W 106th St. Lenexa, KS 66215
Phone: 1-888-749-8682 or 1-913-341-5343;
www.phytotechlab.com

EMERGENCY PHONE NUMBER: 1-800-535-5053 - US Only
(INFOTRAC): 1-352-323-3500 - International

RECOMMENDED USE: For Laboratory-use or Further Manufacture only

RESTRICTIONS ON USE: Products sold by PhytoTech Labs Inc. are intended for laboratory and further manufacturing use only. Products are not to be used as human or animal therapeutics, cosmetics, agricultural or pesticidal products, food additives, or as household chemicals

2. HAZARDS IDENTIFICATION

Classification of the substance or mixture:

GHS Classification:

- H302 – Acute toxicity, Oral (Category 4)
- H332 – Acute toxicity, Inhalation (Category 4)
- H315 - Skin irritation (Category 2)
- H317 - Skin sensitization (Category 1)
- H334 - Respiratory sensitization (Category 1)
- H350 - Carcinogenicity (Category 1A)
- H360 - Reproductive toxicity (Category 1B)
- H372 – Specific target organ toxicity – Repeated exposure – Inhalation (Category 1)
- H400 – Acute aquatic toxicity (Category 1)
- H410 – Chronic aquatic toxicity (Category 1)

GHS Label elements, including hazard and precautionary statements:



Signal Word: **Danger**

Hazard Statements:

- H302 + H332 – Harmful if swallowed or if inhaled.
- H315 – Causes skin irritation.
- H317 – May cause an allergic reaction.
- 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 if inhaled.
- H410 – Very toxic to aquatic life with long lasting effects

Precautionary Statements:

- P202 – Do not handle until all safety precautions have been read and understood.
- P260 – Do not breathe dust.
- P273 – Avoid release to the environment.
- P280 – Wear protective gloves/protective clothing/eye protection/face protection.
- P302 + P352 – IF ON SKIN: Wash with plenty of soap and water.
- P304 + P340 + P312 – IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

3. COMPOSITION/INFORMATION ON INGREDIENTS

CAS No: 10101-97-0

Formula: NiSO₄•6H₂O

Molecular Weight: 262.84 g/mol

EC No.: 232-104-9

Ingredient	CAS Number	Percent	Hazardous
Nickel Sulfate, Hexahydrate	10101-97-0	>98 %	OSHA PEL: 1 mg (Ni)/m ³ ; ACGIH TLV: 0.1 mg (Ni)/m ³

4. FIRST AID MEASURES

General Advice: Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

Route of Entry	Symptoms	First Aid Procedures
Ingestion	May cause irritation if swallowed	If swallowed, wash out mouth with water. Never give anything by mouth to an unconscious person. Get medical attention.
Inhalation	May cause irritation to respiratory tract	Safely remove victim to fresh air. If not breathing, institute cardiopulmonary resuscitation (CPR). If breathing is difficult, ensure clear airway and give oxygen. Get medical attention.
Eye Contact	Direct contact may cause irritation. May cause redness, tearing, or blurred vision.	Flush immediately with large amounts of water for at least 15 minutes. Eyelids should be held away from the eyeball to ensure thorough rinsing. Get medical attention if irritation persists.
Skin Contact	Irritating. May cause reddening, itching or inflammation.	Wash area thoroughly with soap and water. Remove and wash contaminated clothing. Get medical attention if irritation persists.

Most Important Symptoms or Effects, Both Acute and Delayed:

See section 2 and/or section 11

Recommendation for Immediate Medical Care and Special Treatment Needed:

No data available

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media:	Water spray, carbon dioxide, dry chemical powder, or appropriate foam. Use extinguishing media suitable for surrounding fire.
Special Protective Equipment and Precaution for Firefighters:	In the event of a fire, wear full protective clothing and NIOSH approved self-contained breathing apparatus. Evacuate the area and fight fire from a safe distance.
Hazardous Combustion Products:	May emit toxic fumes under fire conditions.
Toxic Gases Produced:	Sulfur oxides, nickel oxides

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures:

Use personal protection recommended in Section 8. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation, especially in confined areas. Evacuate personnel to safe areas. Avoid breathing dust.

Environmental Precautions:	Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
Method of Containment and Cleanup:	Wear suitable protective clothing. Avoid dust formation. Carefully sweep up and remove. Place material in a dry container and cover. Remove from the area. Flush spill area with water. Do not let products enter drains.

7. HANDLING AND STORAGE

Precaution for Safe Handling:	Avoid contact with skin and eyes. Avoid dust formation and aerosols. Avoid incompatible substances. Provide adequate ventilation at places where dust is formed. Wash thoroughly after use.
Conditions for Safe Storage:	Keep in a tightly closed container and store in a cool, dry, and well-ventilated area. Protect from moisture.

Recommended Storage Temperature: Room Temperature

Incompatibilities: Strong oxidizing agents, strong acids, alkalis

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

OSHA's Permissible Exposure Limits (PELs): 1 mg/m³

ACGIH's Threshold Limit Values (TLVs): 0.1 mg/m³

Engineering Controls: Handle in accordance to general industrial hygiene and safety practice.

Personal Protective Equipment (PPE):

Eye/Face Protection: Chemical safety glasses or goggles. Have eye-washing facilities readily available where eye contact can occur.

Skin Protection: Protective gloves

Body Protection: Lab coat

Respiratory Protection: Wear appropriate respirator

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Bluish to greenish crystalline powder

pH (0.0001 g/L): No data available

Solubility: Soluble in Water

Melting Range: No data available

Vapor Density: No data available

Vapor Pressure: No data available

Specific Gravity: No data available

Odor: Odorless

Odor Threshold: No data available

Viscosity: No data available

Relative Density: No data available

Evaporation Rate: No data available

Initial Boiling Point and Boiling Range: No data available

Flammability (solid, gas): No data available

Partition coefficient: n-octanol/water): No data available

Auto-ignition Temperature: No data available

Decomposition Temperature: No data available

Flash Point (Closed Cup): No data available

Flammable Limits: Upper (%) – No data available Lower (%) – No data available

10. STABILITY AND REACTIVITY

Reactivity: No data available

Chemical Stability: Stable under normal conditions of use

Possibility of Hazard Reactions: Will not occur

Conditions to Avoid: Excessive heat, dust generation

Incompatibles Materials: Strong oxidizing agents, strong acids, alkalis

Hazardous Decomposition Products: Sulfur oxides, nickel oxides

11. TOXICOLOGICAL INFORMATION

Toxicity: LD₅₀ (Oral-Rat)(mg/Kg): 361
LD₅₀ (Inhalation-Rat)(mg/L)(4h): 2.48
LD₅₀ (Oral-Mouse)(mg/Kg): No data available

Carcinogenicity: Human carcinogen. May cause cancer by inhalation

NTP: Group 2
IARC: Group 1
OSHA Reg: + (Proven)

Respiratory or skin sensitization: May cause allergic skin reaction.

Germ cell mutagenicity: In vitro tests showed mutagenic effects.

Reproductive Toxicity: Presumed human reproductive toxicant. May damage the unborn child.

Symptoms Associated with Overexposure: Irritation, itching, gastrointestinal upset, depression, changes in organ weight, possible mutagenic and tumorigenic effects, blood effects, weight gain/loss, hypo- or hyperglycemia, dermatitis, allergic reaction, kidney or liver impairment, changes in sense of smell, effects on reproduction.

Specific Target Organ Toxicity: Single Exposure: No data available
Repeated Exposure: Inhalation – causes damage to organs

Target Organs: Kidney, liver, lungs, endocrine system

Medical Conditions Aggravated By Exposure: Pre-existing conditions

Routes of Entry: Ingestion, inhalation, skin and eye contact

NIOSH/RTECS NO: QR9600000

The toxicological properties of this product have not been thoroughly investigated

12. ECOLOGICAL INFORMATION

Ecotoxicity: No data available
Persistence and Degradability: No data available
Bioaccumulative Potential: No data available
Mobility in Soil: No data available
Other Adverse Effects: Toxic to aquatic life

13. DISPOSAL CONSIDERATION

Disposal Procedure: Dispose in accordance with all applicable federal, state, and local environmental regulations.

EPA Hazardous Waste Number: No data available

14. TRANSPORT INFORMATION

Domestic (D.O.T.): Proper Shipping Name: CHEMICALS, N.O.S. (NON-REGULATED)
Hazard Class: N/A
UN/NA: N/A
Labels: N/A

International:

IMDG: Proper Shipping Name: CHEMICALS, N.O.S. (NON-REGULATED)

Hazard Class: N/A
UN/NA: N/A
Labels: N/A

IATA: Proper Shipping Name: CHEMICALS, N.O.S. (NON-REGULATED)
Hazard Class: N/A
UN/NA: N/A
Labels: N/A

15. REGULATORY INFORMATION

TSCA: No

SARA TITLE III:

Section 302 (EHS) Ingredients: No
Section 313 Ingredients: Yes
Section 304 (EHS/CERCLA) Ingredients: Yes – CAS No.: 10101-97-0 Nickel sulfate hexahydrate
Section 311/312 Hazard: Acute Health Hazard, Chronic Health Hazard

Massachusetts Right to Know Components: This product is not on the Massachusetts Substance List (MSL).

Pennsylvania Right to Know Components: This product is not listed on the Pennsylvania Code's Hazardous Substance List (Chapter 323).

New Jersey Right to Know Components: This product is not listed amongst the New Jersey Right to Know Hazardous Substance List.

California Prop. 65 Components: WARNING: This product is known to the State of California to cause cancer

16. OTHER INFORMATION

HMIS Rating:	Health Hazard	Chronic Health Hazard	Flammability	Physical Hazard
	2	*	0	0
NFPA Rating:	Health Hazard	Fire Hazard	Reactivity Hazard	Special Hazard
	2	0	0	

*Chronic Hazard: Chronic (long-term) health effects may result from repeated overexposure.

PhytoTech Labs Inc. provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. The above information is intended to be used only as a guide to the appropriate precautionary handling of this material by a properly trained person. PhytoTech Labs Inc. shall not be held liable for any damage resulting from handling or from contact with the above product. This product is intended for LABORATORY USE OR FURTHER MANUFACTURING ONLY. Our products may NOT BE USED as drugs, cosmetics, agricultural or pesticidal products, food additives or as household chemicals.

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