



LTS Research Laboratories, Inc.
Safety Data Sheet
Nickel Phosphide

1. Product and Company Identification

Trade Name: Nickel phosphide
Chemical Formula: Ni₂P
Recommended Use: Scientific research and development

Manufacturer/Supplier: LTS Research Laboratories, Inc.
Street: 37 Ramland Road
City: Orangeburg
State: New York
Zip Code: 10962
Country: USA
Tel #: 855-587-2436 / 855-lts-chem

24-Hour Emergency Contact: 800-424-9300 (US & Canada)
+1-703-527-3887 (International)

2. Hazards Identification

Signal Word: Danger



Hazard Statements: H317 May cause an allergic skin reaction
H350 May cause cancer by inhalation
H372 Causes damage to organ through prolonged or repeated exposure
H410 Very toxic to aquatic life with lasting effects

Precautionary Statements: P201 Obtain special instructions before use
P273 Avoid release to the environment
P280 Wear protective gloves
P308+P313 If exposed: Seek medical attention

HMIS Health Ratings (0-4):

Health: 2
Flammability: 0
Physical: 0

3. Composition

Chemical Family: Salt
Additional Names: N/A

Nickel phosphide (Ni₂P):

Percentage: 100 wt%
CAS #: 12035-64-2
EC #: 234-828-0

4. First Aid Procedures

General Treatment:	Seek medical attention if symptoms persist.
Special Treatment:	None
Important Symptoms:	None
Inhalation:	Remove victim to fresh air. Supply oxygen if breathing is difficult.
Ingestion:	Give one to two glasses of water and induce vomiting. Never induce vomiting or give anything by mouth to an unconscious person.
Skin:	Wash affected area with mild soap and water. Remove any contaminated clothing.
Eyes:	Flush eyes with water, blinking often for several minutes. Remove contact lenses if present and easy to do. Continue rinsing

5. Fire and Explosion Hazards Data

Flammability:	Non-flammable
Flash Point:	N/A
Autoignition Temperature:	N/A
Extinguishing Media:	Do not use water – use CO ₂ , sand, extinguishing powder.
Spec. Fire Fighting Procedure:	Use full-face, self-contained breathing apparatus with full protective clothing to prevent contact with skin and eyes.

6. Accidental Release Measures

If Material Is Released/Spilled:	Wear appropriate respiratory and protective equipment specified in special protection information. Isolate spill area and provide ventilation. Vacuum up spill using a high efficiency particulate absolute (HEPA) air filter and place in a closed container for disposal. Take care not to raise dust.
Environmental Precautions:	Isolate runoff to prevent environmental pollution.

7. Handling and Storage

Handling Conditions:	Wash thoroughly after handling.
Storage Conditions:	Store in a cool dry place in a tightly sealed container.
Work/Hygienic Maintenance:	Do not use tobacco or food in work area. Wash thoroughly before eating and smoking. Do not blow dust off clothing or skin with compressed air.
Ventilation:	Provide sufficient ventilation to maintain concentration at or below threshold limit.

8. Exposure Controls and Personal Protection

Permissible Exposure Limits:	N/A
Threshold Limit Value:	N/A
Special Equipment:	None
Respiratory Protection:	Dust Respirator, NIOSH approved
Protective Gloves:	Rubber gloves
Eye Protection:	Safety glasses or goggles
Body Protection:	Protective work clothing. Wear close-toed shoes and long sleeves/pants.

9. Physical and Chemical Characteristics

Color	Grey
Form:	Powder, Granules, Pellets, Sputtering target, Custom parts
Odor:	Odorless (Garlic odor may indicate highly flammable, toxic gas)
Water Solubility:	Insoluble
Boiling Point:	N/A
Melting Point:	N/A
Density:	N/A
Molecular weight:	148.36 g/mol

10. Reactivity

Stability:	Stable under recommended storage conditions
Reacts With:	Oxidizing agents, Acids, Halogens, Strong bases
Incompatible Conditions:	None
Hazardous Decomposition Products:	Metal oxide fume

11. Toxicological Information

Potential Health Effects:

Eyes:	May cause irritation
Skin:	Harmful if absorbed through skin. May cause allergic reaction.
Ingestion:	Harmful if swallowed
Inhalation:	Harmful if inhaled
Chronic:	N/A

Signs & Symptoms:

N/A

Aggravated Medical Conditions:

N/A

Median Lethal Dose:

N/A

Carcinogen:

IARC: Group 1: Carcinogenic to humans

12. Ecological Information

Notes:

Very toxic to aquatic organisms. May harm environment with long-lasting effects.
Do not allow runoff to reach drinking water even in small amounts.

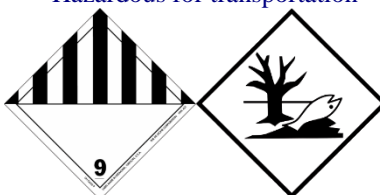
13. Disposal Considerations

Dispose of in accordance with local, state, national, and international regulations.

14. Transportation Data

Hazardous:

Hazardous for transportation



Hazard Class:

9 Miscellaneous hazardous substances

Packing Group:

III

UN Number:

UN3077

Proper Shipping Name:

Environmentally hazardous substance, solid, n.o.s. (Nickel phosphide)

Additional markings:

Environmental hazard

15. Regulatory Information

Sec 302 Extremely Hazardous:	No
Sec 304 Reportable Quantities:	N/A
Sec 313 Toxic Chemicals:	Yes

16. Other Information

This safety data sheet should be used in conjunction with technical sheets. It does not replace them. The information given is based on our knowledge of this product, at the time of publication. It is given in good faith. The attention of the user is drawn to the possible risks incurred by using the product for any other purpose other than that for which it was intended. This does not in any way excuse the user from knowing and applying all the regulations governing his activity. It is the sole responsibility of the user to take all precautions required in handling the product. The aim of the mandatory regulations mentioned is to help the user to fulfill his obligations regarding the use of hazardous products.

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