According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 01.15.2018

Nickel Metal Shot

SECTION 1: Identification

Product identifier

Product name: Nickel Metal Shot Product code: NI6000

Recommended use of the product and restriction on use

Relevant identified uses: Laboratory chemicals Uses advised against: Not determined or not applicable. Reasons why uses advised against: Not determined or not applicable.

Manufacturer or supplier details

Manufacturer: United States AquaPhoenix Scientific, Inc. 860 Gitts Run Road Hanover, PA 17331 1-717-632-1291

Emergency telephone number: United States ChemTel Inc +1(800)255-3924 +1(813)248-0585

SECTION 2: Hazard(s) identification

GHS classification:

Skin sensitization, category 1 Eye irritation, category 2A

Label elements

Hazard pictograms:



Signal word: Warning

Hazard statements:

H317 May cause an allergic skin reaction

H319 Causes serious eye irritation

Precautionary statements:

P272 Contaminated work clothing should not be allowed out of the workplace

P280 Wear protective gloves/protective clothing/eye protection/face protection

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

P264 Wash skin thoroughly after handling

P321 Specific treatment (see supplemental first aid instructions on this label).

P363 Wash contaminated clothing before reuse

P302+P352 If on skin: Wash with soap and water

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P308+P313 If exposed or concerned: Get medical advice/attention P333+P313 If skin irritation or a rash occurs: Get medical advice/attention P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing 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: 7440-02-0	Nickel Metal	100

Additional Information: None

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

After skin contact:

Rinse affected area with soap and water If symptoms develop or persist, seek medical attention

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 Seek medical attention if irritation persists or if concerned

After swallowing:

Rinse mouth thoroughly Seek medical attention if irritation, discomfort, or vomiting persists

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

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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

Special protective equipment for firefighters:

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.

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
ACGIH	Nickel Metal		8-Hour Exposure Limit (TLV-TWA): 1.5 mg/m ³ (inhalable fraction)
NIOSH	Nickel Metal	7440-02-0	REL (for up to a 10-hour workday during a 40-hour workweek): 0.015 mg/m ³ (as Ni)

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Country (Legal Basis)	Substance	Identifier	Permissible concentration
	Nickel Metal	7440-02-0	IDLH: 10 mg/m ³
United States (OSHA)	Nickel Metal	7440-02-0	Z-1-A TWA: 1 mg/m³ (as Ni)
	Nickel Metal	7440-02-0	Z-1 PEL: 1 mg/m ³ (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:

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	Grey solid
Odor	Odorless
Odor threshold	Not determined or not available.
рН	9 - 11 at 20°C
Melting point/freezing point	1455°C
Initial boiling point/range	2730°C
Flash point (closed cup)	Not determined or not available.
Evaporation rate	Not determined or not available.
Flammability (solid, gas)	Flammable solid
Upper flammability/explosive limit	Not determined or not available.
Lower flammability/explosive limit	Not determined or not available.
Vapor pressure	1 mmHg at 1810°C
Vapor density	Not determined or not available.

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Density	Not determined or not available.
Relative density	Not determined or not available.
Solubilities	Insoluble.
Partition coefficient (n-octanol/water)	Not determined or not available.
Auto/Self-ignition temperature	87°C
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

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. Dust generation. Excessive heat.

Incompatible materials:

Reactive with oxidizing agents, combustible materials, metals, acids.

Hazardous decomposition products:

Nickel oxides.

SECTION 11: Toxicological information

Acute toxicity

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

Product data: No data available.

Substance data: No data available.

Skin corrosion/irritation

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

Product data: No data available.

Substance data: No data available.

Serious eye damage/irritation

Assessment: Causes serious eye irritation

Product data: No data available.

Substance data: No data available.

Respiratory or skin sensitization

Assessment: May cause an allergic skin reaction

Product data: No data available.

Substance data:

Name	Result
Nickel Metal	May cause an allergic skin reaction.

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Carcinogenicity

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

Product data: No data available.

Substance data:

Name	Species	Result
Nickel Metal	Not applicable	Suspected of causing cancer.

International Agency for Research on Cancer (IARC):

Name	Classification
Nickel Metal	Group 2B

National Toxicology Program (NTP):

Name	Classification
Nickel Metal	Reasonably anticipated to be human carcinogens

Germ cell mutagenicity

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

Product data: No data available.

Substance data: No data available.

Reproductive toxicity

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

Product data: No data available.

Substance data: No data available.

Specific target organ toxicity (single exposure)

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

Product data: No data available.

Substance data: No data available.

Specific target organ toxicity (repeated exposure)

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

Product data: No data available.

Substance data:

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

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: Based on available data, the classification criteria are not met. **Product data:** No data available.

Substance data: No data available.

Chronic (long-term) toxicity

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Product data: No data available. Substance data: No data available.

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	Not regulated
UN proper shipping name	Not regulated
UN transport hazard class(es)	None
Packing group	None
Environmental hazards	None
Special precautions for user	None

International Maritime Dangerous Goods (IMDG)

UN number	Not regulated
UN proper shipping name	Not regulated
UN transport hazard class(es)	None
Packing group	None
Environmental hazards	None
Special precautions for user	None

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

UN number	Not regulated
UN proper shipping name	Not regulated
UN transport hazard class(es)	None
Packing group	None
Environmental hazards	None
Special precautions for user	None

SECTION 15: Regulatory information

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7440-02-0	Nickel Metal				Liste	
Significant New U	Jse Rule (TSCA Se	ction 5): Not dete	ermined.			
Export notificatio	n under TSCA Sec	tion 12(b): Not d	etermined.			
SARA Section 311	L/312 hazards:					
Acute	Chronic	Fire	Fire Pressure Reactive		9	
No	No	No	No	No	No	
SARA Section 302	2 extremely hazar	dous substances	: Not determined.	•		
SARA Section 313	8 toxic chemicals:					
7440-02-0	Nickel Metal				Liste	
	•				•	
CERCLA:						
CERCLA: 7440-02-0	Nickel Metal			Listed	100	
				Listed	100	
7440-02-0 RCRA: Not determi		(CAA): Not deterr	nined.	Listed	100	
7440-02-0 RCRA: Not determi	ned. the Clean Air Act	(CAA): Not deterr	nined.	Listed	100	
7440-02-0 RCRA: Not determi Section 112(r) of	ned. the Clean Air Act	(CAA): Not deterr	nined.	Listed	100 Lister	
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7440-02-0 RCRA: Not determi Section 112(r) of Massachusetts Ri 7440-02-0 New Jersey Right 7440-02-0 New York Right to	ned. the Clean Air Act ight to Know: Nickel Metal to Know: Nickel Metal o Know: Nickel Metal	(CAA): Not deterr	nined.	Listed	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: 1-0-0

HMIS: 1-0-0-X Initial preparation date: 01.15.2018

End of Safety Data Sheet

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