Nickel Metal Shot,

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

Product name : **Nickel Metal Shot,**

Manufacturer/Supplier Trade name:

Manufacturer/Supplier Article number: **S25444A**

Recommended uses of the product and uses restrictions on use:

Manufacturer Details:

AquaPhoenix Scientific
9 Barnhart Drive, Hanover, PA 17331

Supplier Details:

Fisher Science Education
15 Jet View Drive, Rochester, NY 14624

Emergency telephone number:

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

SECTION 2 : Hazards identification

Classification of the substance or mixture:

Flammable
Pyrophoric liquids, category 1

Irritant
Skin sensitization, category 1

Health hazard
Specific target organ toxicity following repeated exposure, category 1
Carcinogenicity, category 2

Chronic hazards to the aquatic environment, category 3

Pyrophoric solids. 1
Skin. Sens 1
Carcin. 2
STOT RE. 1
Aq AcTox 3
Aq. ChrTox. 3

Signal word :Danger

Hazard statements:
Catches fire spontaneously if exposed to air
May cause an allergic skin reaction
Suspected of causing cancer
Causes damage to organs through prolonged or repeated exposure
Harmful 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
Obtain special instructions before use
Wear protective gloves/protective clothing/eye protection/face protection
Use personal protective equipment as required
Do not handle until all safety precautions have been read and understood
Keep away from heat/sparks/open flames/hot surfaces. No smoking
Do not allow contact with air
Do not breathe dust/fume/gas/mist/vapours/spray
Wash skin thoroughly after handling
Do not eat, drink or smoke when using this product
Contaminated work clothing should not be allowed out of the workplace
Avoid release to the environment
IF ON SKIN: Immerse in cool water/wrap in wet bandages
IF ON SKIN: Wash with soap and water
IF exposed or concerned: Get medical advice/attention
If skin irritation or a rash occurs: Get medical advice/attention
Wash contaminated clothing before reuse
In case of fire: Use agents recommended in section 5 for extinction
Store locked up
Dispose of contents and container as instructed in Section 13

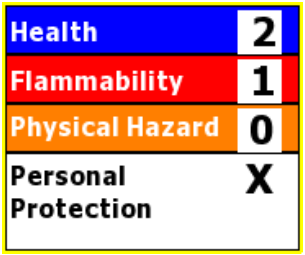
Other Non-GHS Classification:

WHMIS

D2A

NFPA/HMIS

NFPA SCALE (0-4)



HMIS RATINGS (0-4)

SECTION 3 : Composition/information on ingredients

Ingredients:		
CAS 7440-02-0	Nickel Metal	100 %
		Percentages are by weight

SECTION 4 : First aid measures

Description of first aid measures

After inhalation: Seek medical attention.Move exposed to fresh air. Give artificial respiration if necessary. If breathing is difficult give oxygen.Loosen clothing and place exposed in a comfortable position.

After skin contact: Take victim immediately to hospital.Wash hands and exposed skin with soap and plenty of water.

After eye contact: Seek medical attention.Protect unexposed eye.Flush exposed eye gently using water for 15-20 minutes. Remove contact lenses while rinsing.

After swallowing: Seek medical attention.Rinse mouth with water.Do not induce vomiting. Never give anything by mouth to an unconscious person.Dilute with water.

Most important symptoms and effects, both acute and delayed:

Irritation.Shortness of breath.Headache.Nausea.Dizziness.;Dermatitis; Pneumoconiosis. Lower Respiratory Tract irritation; Neurotoxicity. 7440-02-0: sensitising effects, Inhalation may provoke the following symptoms:, irritant effects, Cough, sneezing, Lachrymation . 7440-02-0 Stomach - Irregularities - Based on Human Evidence. Irritating to skin and gastrointestinal tract

Indication of any immediate medical attention and special treatment needed:

If seeking medical attention provide SDS document to physician. Physician should treat symptomatically.

SECTION 5 : Firefighting measures

Extinguishing media

Suitable extinguishing agents: Use water, dry chemical, chemical foam, carbon dioxide, or alcohol-resistant foam.Use water spray to cool unopened containers. Dike fire-control water for later disposal.

For safety reasons unsuitable extinguishing agents: No information available.

Special hazards arising from the substance or mixture:

Thermal decomposition can lead to release of irritating gases and vapors.

Advice for firefighters:

Protective equipment: Wear protective eyeware, gloves, and clothing. Refer to Section 8.

Additional information (precautions): Avoid inhaling gases, fumes, dust, mist, vapor, and aerosols. Avoid contact with skin, eyes, and clothing.Avoid dust generation.Remove heat, sparks, and all sources of ignition.

SECTION 6 : Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Ensure adequate ventilation.Ensure that air-handling systems are operational.

Environmental precautions:

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

Methods and material for containment and cleaning up:

Contain spillage. Collect with an electrically protected vacuum cleaner or by wetbrushing and place in container for disposal according to local regulations.Wear protective eyeware, gloves, and clothing. Refer to Section 8.Always obey local regulations.If necessary use trained response staff or contractor. Evacuate personnel to safe areas. Containerize for disposal. Refer to Section 13.Keep in suitable closed containers for disposal.

Reference to other sections:

SECTION 7 : Handling and storage

Precautions for safe handling:

Use explosion-proof equipment.Combustible substance.Avoid contact with skin, eyes, and clothing.Follow good

hygiene procedures when handling chemical materials. Refer to Section 8.Follow proper disposal methods. Refer to Section 13.Do not eat, drink, smoke, or use personal products when handling chemical substances.Avoid dust generation.Remove heat, sparks, and all sources of ignition.

Conditions for safe storage, including any incompatibilities:

Store in a cool location.Keep away from food and beverages.Protect from freezing and physical damage.Provide ventilation for containers. Keep container tightly sealed. Store away from incompatible materials.

SECTION 8 : Exposure controls/personal protection

Control Parameters: 7440-02-0, Nickel , TWA 1.5 mg/m3 USA. ACGIH
7440-02-0, Nickel, TWA 1.000000 mg/m3 USA. OSHA
7440-02-0 , Nickel, TWA 0.015000 mg/m3 USA. NIOSH

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.

Respiratory protection: Not required under normal conditions of use. Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls.When necessary use NIOSH approved breathing equipment.

Protection of skin: Select glove material impermeable and resistant to the substance.Select glove material based on rates of diffusion and degradation. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices.Use proper glove removal technique without touching outer surface. Avoid skin contact with used gloves.Wear protective clothing.

Eye protection: Face shield and safety glasses are appropriate eye protection. Wear equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

General hygienic measures: Perform routine housekeeping.Wash hands before breaks and immediately after handling the product.Avoid contact with skin, eyes, and clothing.Before rewearing wash contaminated clothing.

SECTION 9 : Physical and chemical properties

Appearance (physical state,color):	Gray slurry	**Explosion limit lower**: **Explosion limit upper**:	Not Determined Not Determined
Odor:	Not Determined	**Vapor pressure**:	1 mm Hg @ 1810°C
Odor threshold:	Not Determined	**Vapor density**:	Not Determined
pH-value:	9 - 11 at 20 °C	**Relative density**:	Not Determined
Melting/Freezing point:	1455°C	**Solubilities**:	Insoluble

Boiling point/Boiling range:	2730°C	**Partition coefficient (n-octanol/water)**:	Not Determined
Flash point (closed cup):	Not Determined	**Auto/Self-ignition temperature**:	87 °C
Evaporation rate:	Not Determined	**Decomposition temperature**:	Not Determined
Flammability (solid,gaseous):	Flammable	**Viscosity**:	a. Kinematic:Not Determined b. Dynamic: Not Determined
Density: Not Determined			

SECTION 10 : Stability and reactivity

Reactivity: Supplied as a slurry in water. This chemical as a very fine dry powder is pyrophoric. Nonreactive under normal conditions.
Chemical stability: Keep wetted with water.Stable under normal conditions.
Possible hazardous reactions: If allowed to dry in air, it will flare rapidly to red heat and provide an ignition source for exposed combustible materials. To prevent spontaneous ignition, it should be covered in an excess of aqueous base at all times.If allowed to dry in air, it may smolder to red heat and provide a combustion source for exposed combustible materials. None under normal processing.
Conditions to avoid: Incompatible materials.Dust generation.Excessive heat.
Incompatible materials: Acids, Oxidizing agents, Sulphur compounds, Hydrogen gas, Oxygen, Methanol, organic solvents, Aluminium, Fluorine, Ammonia. Peroxides, Metals.
Hazardous decomposition products: Hydrogen chloride gas and Chlorine. Burning produces obnoxious toxic fumes.Nickel oxides

SECTION 11 : Toxicological information

Acute Toxicity:		
Oral:	7440-02-0	LD50 oral-rat: 105mg/kg
Chronic Toxicity: No additional information.		
Corrosion Irritation: No additional information.		
Sensitization:		Irritating to skin and gastrointestinal tract
Single Target Organ (STOT):		7440-02-0: sensitising effects, Inhalation may provoke the following symptoms:, irritant effects, Cough, sneezing, Lachrymation
Numerical Measures:		No additional information.
Carcinogenicity:		7440-02-0 : IARC: 2B - Group 2B: Possibly carcinogenic to humans (Nickel) NTP: Reasonably anticipated to be a human carcinogen (Nickel)
Mutagenicity:		Possible risk of irreversible effects.
Reproductive Toxicity:		May cause harm to the unborn child.

SECTION 12 : Ecological information

Ecotoxicity Persistence and degradability:
Bioaccumulative potential:
Mobility in soil:
Other adverse effects:

SECTION 13 : Disposal considerations

Waste disposal recommendations:

Contact a licensed professional waste disposal service to dispose of this material.Dispose of empty containers as unused product.Product or containers must not be disposed together with household garbage. It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities (US 40CFR262.11). Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations. Ensure complete and accurate classification.

SECTION 14 : Transport information

UN-Number

1378

UN proper shipping name

Metal catalyst, wetted (Nickel, Aluminium)

Transport hazard class(es)

Class:
4.2 Substances liable to spontaneous combustion

Packing group:II
Environmental hazard:
Transport in bulk:
Special precautions for user:

SECTION 15 : Regulatory information

United States (USA)

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

Reactive, Chronic

SARA Section 313 (Specific toxic chemical listings):

7440-02-0 Nickel
7429-90-5 Aluminium

RCRA (hazardous waste code):

None of the ingredients is listed

TSCA (Toxic Substances Control Act):

All ingredients are listed.

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

7440-02-0 Nickel 100 lbs

Proposition 65 (California):

Chemicals known to cause cancer:

None of the ingredients is listed

Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed

Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed

Chemicals known to cause developmental toxicity:

None of the ingredients is listed

Canada

Canadian Domestic Substances List (DSL):

All ingredients are listed.

Canadian NPRI Ingredient Disclosure list (limit 0.1%):

7440-02-0 Nickel

Canadian NPRI Ingredient Disclosure list (limit 1%):

7429-90-5 Aluminium

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:

Abbreviations and acronyms:

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