

# Safety Data Sheet

acc. to OSHA HCS

Printing date 05/22/2024

Reviewed on 05/22/2024

## 1 Identification

- **Product identifier**
- **Trade name:** Nickel Metal, Laboratory Grade, Shot
- **Article number:** N3503
- **CAS Number:**  
7440-02-0
- **EC number:**  
231-111-4
- **Index number:**  
028-002-00-7
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
Aqua Solutions, Inc.  
6913 Highway 225  
DEER PARK, TX 77536  
USA  
800-256-2586
- **Information department:**  
Technical Coordinator  
Sherman Nelson [shermann@aquasolutions.org](mailto:shermann@aquasolutions.org)
- **Emergency telephone number:**  
Chemtec: 800-424-9300  
Canutec: 613-996-6666



## 2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS08 Health hazard

Carcinogenicity 2

H351 Suspected of causing cancer. Route of exposure:  
Inhalation.

Specific Target Organ Toxicity - Repeated Exposure 1

H372 Causes damage to the respiratory system through  
prolonged or repeated exposure. Route of exposure:  
Inhalation.

GHS07

Sensitization - Skin 1

H317 May cause an allergic skin reaction.

- **Label elements**

- **GHS label elements** The substance is classified and labeled according to the Globally Harmonized System (GHS).

- **Hazard pictograms**



GHS07



GHS08

- **Signal word** Danger

- **Hazard statements**

May cause an allergic skin reaction.

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*Suspected of causing cancer. Route of exposure: Inhalation.*

*Causes damage to the respiratory system through prolonged or repeated exposure. Route of exposure: Inhalation.*

· **Precautionary statements**

*Obtain special instructions before use.*

*Do not handle until all safety precautions have been read and understood.*

*Do not breathe dust/fume/gas/mist/vapors/spray.*

*Wash thoroughly after handling.*

*Do not eat, drink or smoke when using this product.*

*Contaminated work clothing must not be allowed out of the workplace.*

*Wear protective gloves/protective clothing/eye protection/face protection.*

*If on skin: Wash with plenty of water.*

*IF exposed or concerned: Get medical advice/attention.*

*Specific treatment (see on this label).*

*Get medical advice/attention if you feel unwell.*

*If skin irritation or rash occurs: Get medical advice/attention.*

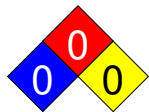
*Wash contaminated clothing before reuse.*

*Store locked up.*

*Dispose of contents/container in accordance with local/regional/national/international regulations.*

· **Classification system:**

· **NFPA ratings (scale 0 - 4)**



Health = 0

Fire = 0

Reactivity = 0

· **HMIS-ratings (scale 0 - 4)**



Health = 0

Fire = 0

Reactivity = 0

· **Other hazards**

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

### 3 Composition/information on ingredients

· **Chemical characterization: Substances**

· **CAS No. Description**

CAS: 7440-02-0 Nickel Metal

· **Identification number(s)**

· **EC number:** 231-111-4

· **Index number:** 028-002-00-7

### 4 First-aid measures

· **Description of first aid measures**

· **General information:**

*Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.*

· **After inhalation:**

*Supply fresh air and to be sure call for a doctor.*

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- In case of unconsciousness place patient stably in side position for transportation.*
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:** Rinse opened eye for several minutes under running water.
- **After swallowing:** If symptoms persist consult doctor.
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

### 5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:** Use fire fighting measures that suit the environment.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** No special measures required.

### 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** Not required.
- **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**  
Dispose contaminated material as waste according to section 13.
- **Reference to other sections**  
See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.
- **Protective Action Criteria for Chemicals**
- **PAC-1:** 4.5 mg/m<sup>3</sup>
- **PAC-2:** 50 mg/m<sup>3</sup>
- **PAC-3:** 99 mg/m<sup>3</sup>

### 7 Handling and storage

- **Handling:**
- **Precautions for safe handling** No special precautions are necessary if used correctly.
- **Information about protection against explosions and fires:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** None.
- **Specific end use(s)** No further relevant information available.

### 8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see section 7.

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· **Control parameters**

· **Components with limit values that require monitoring at the workplace:**

**CAS: 7440-02-0 Nickel Metal**

PEL	Long-term value: 1 mg/m <sup>3</sup>
REL	Long-term value: 0.015 mg/m <sup>3</sup> as Ni; See Pocket Guide App. A
TLV	Long-term value: 1.5* mg/m <sup>3</sup> elemental, *inhalable fraction, A5, BEI

· **Ingredients with biological limit values:**

**CAS: 7440-02-0 Nickel Metal**

BEI	5 µg/L LD50 Intraperitoneal: urine Time: post-shift at end of workweek LD50: Nickel (background)
	30 µg/L LD50 Intraperitoneal: urine Time: post-shift at end of workweek LD50: Nickel (background)

· **Additional information:** The lists that were valid during the creation were used as basis.

· **Exposure controls**

· **Personal protective equipment:**

· **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.  
Immediately remove all soiled and contaminated clothing.  
Wash hands before breaks and at the end of work.  
Store protective clothing separately.

· **Breathing equipment:**

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

· **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.  
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

· **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

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## · Eye protection:



Tightly sealed goggles

## · Body protection: Protective work clothing

## 9 Physical and chemical properties

## · Information on basic physical and chemical properties

## · General Information

## · Appearance:

Form: Solid in various forms

Color: Silver-colored

· Odor: Odorless

· Odor threshold: Not determined.

· pH-value: Not applicable.

## · Change in condition

Melting point/Melting range: Undetermined.

Boiling point/Boiling range: Undetermined.

· Flash point: Not applicable.

· Flammability (solid, gaseous): Product is not flammable.

· Decomposition temperature: Not determined.

· Ignition temperature: Not determined.

· Danger of explosion: Product does not present an explosion hazard.

## · Explosion limits:

Lower: Not determined.

Upper: Not determined.

· Vapor pressure: Not applicable.

· Density at 20 °C (68 °F): 8.91 g/cm<sup>3</sup> (74.35395 lbs/gal)

· Relative density: Not determined.

· Vapor density: Not applicable.

· Evaporation rate: Not applicable.

## · Solubility in / Miscibility with

Water: Insoluble.

· Partition coefficient (n-octanol/water): Not determined.

## · Viscosity:

Dynamic: Not applicable.

Kinematic: Not applicable.

· Other information: No further relevant information available.

## 10 Stability and reactivity

· Reactivity: No further relevant information available.

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- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

### 11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No irritating effect.
- **Sensitization:** Sensitization possible through skin contact.
- **Additional toxicological information:**
- **Carcinogenic categories**
- **IARC (International Agency for Research on Cancer) 2B**
- **NTP (National Toxicology Program) R**
- **OSHA-Ca (Occupational Safety & Health Administration) Substance is not listed.**

### 12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behavior in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**
- *Water hazard class 2 (Assessment by list): hazardous for water*
- *Do not allow product to reach ground water, water course or sewage system.*
- *Danger to drinking water if even small quantities leak into the ground.*
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

### 13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**
- *Must not be disposed of together with household garbage. Do not allow product to reach sewage system.*
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

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## 14 Transport information

<i>· UN-Number</i>	
<i>· DOT, ADN, IMDG, IATA</i>	<i>Not regulated</i>
<i>· UN proper shipping name</i>	
<i>· DOT, ADN, IMDG, IATA</i>	<i>Not regulated</i>
<i>· Transport hazard class(es)</i>	
<i>· DOT, ADN, IMDG, IATA</i>	
<i>· Class</i>	<i>Not regulated</i>
<i>· Packing group</i>	
<i>· DOT, IMDG, IATA</i>	<i>Not regulated</i>
<i>· Environmental hazards:</i>	
<i>· Marine pollutant:</i>	<i>No</i>
<i>· Special precautions for user</i>	<i>Not applicable.</i>
<i>· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</i>	<i>Not applicable.</i>
<i>· Transport/Additional information:</i>	
<i>· DOT</i>	
<i>· Remarks:</i>	<i>Not regulated</i>
<i>· IMDG</i>	
<i>· Remarks:</i>	<i>Not regulated</i>
<i>· IATA</i>	
<i>· Remarks:</i>	<i>Not regulated</i>
<i>· UN "Model Regulation":</i>	<i>Not regulated</i>

## 15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture*  
*No further relevant information available.*
- Sara*
- Section 355 (extremely hazardous substances): Substance is not listed.*
- Section 313 (Specific toxic chemical listings): Substance is listed.*
- TSCA (Toxic Substances Control Act): ACTIVE*
- Hazardous Air Pollutants Substance is not listed.*
- Proposition 65*
- Chemicals known to cause cancer: Substance is listed.*
- Chemicals known to cause reproductive toxicity for females: Substance is not listed.*
- Chemicals known to cause reproductive toxicity for males: Substance is not listed.*
- Chemicals known to cause developmental toxicity: Substance is not listed.*
- Carcinogenic categories*
- EPA (Environmental Protection Agency) Substance is not listed.*
- TLV (Threshold Limit Value) A5*
- NIOSH-Ca (National Institute for Occupational Safety and Health) Substance is listed.*
- GHS label elements The substance is classified and labeled according to the Globally Harmonized System (GHS).*

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· **Hazard pictograms**



GHS07 GHS08

· **Signal word** *Danger*

· **Hazard statements**

*May cause an allergic skin reaction.*

*Suspected of causing cancer. Route of exposure: Inhalation.*

*Causes damage to the respiratory system through prolonged or repeated exposure. Route of exposure: Inhalation.*

· **Precautionary statements**

*Obtain special instructions before use.*

*Do not handle until all safety precautions have been read and understood.*

*Do not breathe dust/fume/gas/mist/vapors/spray.*

*Wash thoroughly after handling.*

*Do not eat, drink or smoke when using this product.*

*Contaminated work clothing must not be allowed out of the workplace.*

*Wear protective gloves/protective clothing/eye protection/face protection.*

*If on skin: Wash with plenty of water.*

*IF exposed or concerned: Get medical advice/attention.*

*Specific treatment (see on this label).*

*Get medical advice/attention if you feel unwell.*

*If skin irritation or rash occurs: Get medical advice/attention.*

*Wash contaminated clothing before reuse.*

*Store locked up.*

*Dispose of contents/container in accordance with local/regional/national/international regulations.*

· **Chemical safety assessment:** *A Chemical Safety Assessment has not been carried out.*

## 16 Other information

*This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.*

· **Department issuing SDS:** *Environment protection department.*

· **Contact:**

*Date of Preparation / Last Revision:*

· **Date of preparation / last revision**

*Revision 1.2, 05/22/2024: Reviewed SDS for accuracy. MH/STN  
05/22/2024*

· **Abbreviations and acronyms:**

*IMDG: International Maritime Code for Dangerous Goods*

*DOT: US Department of Transportation*

*IATA: International Air Transport Association*

*EINECS: European Inventory of Existing Commercial Chemical Substances*

*CAS: Chemical Abstracts Service (division of the American Chemical Society)*

*NFPA: National Fire Protection Association (USA)*

*HMIS: Hazardous Materials Identification System (USA)*

*PBT: Persistent, Bioaccumulative and Toxic*

*vPvB: very Persistent and very Bioaccumulative*

*NIOSH: National Institute for Occupational Safety*

*OSHA: Occupational Safety & Health*

*TLV: Threshold Limit Value*

*PEL: Permissible Exposure Limit*

*REL: Recommended Exposure Limit*

*BEI: Biological Exposure Limit*

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*Sensitization - Skin 1: Skin sensitisation – Category 1*

*Carcinogenicity 2: Carcinogenicity – Category 2*

*Specific Target Organ Toxicity - Repeated Exposure 1: Specific target organ toxicity (repeated exposure) – Category 1*

**. \* Data compared to the previous version altered.**

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US