

Safety Data Sheet

acc. to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Printing date: March 27, 2019

Revision: March 27, 2019

1 Identification

- **Product identifier**
- **Trade name:** Zinc, Powdered
- **Product code:** ZN9500
- **CAS Number:**
7440-66-6
- **Recommended use and restriction on use**
- **Recommended use:** Laboratory chemicals
- **Restrictions on use:** No relevant information available.
- **Details of the supplier of the Safety Data Sheet**
- **Manufacturer/Supplier:**
AquaPhoenix Scientific, Inc.
860 Gitts Run Road
Hanover, PA 17331
Phone: (717)632-1291
Toll-Free: (866)632-1291
info@aquaphoenixsci.com
- **Emergency telephone number:**
ChemTel Inc.
(800)255-3924 (North America)
+1 (813)248-0585 (International)

2 Hazard(s) identification

- **Classification of the substance or mixture**
Combustible Dust May form combustible dust concentrations in air.
- **Label elements**
- **GHS label elements**
The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms:** None.
- **Signal word:** Warning
- **Hazard statements:**
May form combustible dust concentrations in air.
- **Precautionary statements:** None.
- **Other hazards** There are no other hazards not otherwise classified that have been identified.

3 Composition/information on ingredients

- **Chemical characterization:** Substances
- **CAS No. Description**
7440-66-6 zinc powder

4 First-aid measures

- **Description of first aid measures**
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.

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- **After skin contact:**
Brush off loose particles from skin.
Wash with soap and water.
If skin irritation is experienced, consult a doctor.
- **After eye contact:**
Remove contact lenses if worn.
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing:**
Rinse out mouth and then drink plenty of water.
Do not induce vomiting; immediately call for medical help.
- **Most important symptoms and effects, both acute and delayed:**
Gastric or intestinal disorders when ingested.
- **Danger:** No relevant information available.
- **Indication of any immediate medical attention and special treatment needed:**
If medical advice is needed, have product container or label at hand.

5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**
For metal fires: Use specific agents only.
Dry sand.
Graphite powder.
Copper powder.
- **For safety reasons unsuitable extinguishing agents:** For metal fires: Use specific agents only.
- **Special hazards arising from the substance or mixture**
May form combustible dust concentrations in air.
Formation of toxic gases is possible during heating or in case of fire.
- **Advice for firefighters**
- **Protective equipment:**
Wear self-contained respiratory protective device.
Wear fully protective suit.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
Ensure adequate ventilation.
For large spills, wear protective clothing.
For large spills, use respiratory protective device against the effects of fumes/dust/aerosol.
Remove ignition sources.
- **Environmental precautions** Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up**
Pick up mechanically.
Sweep up and place into an appropriate container.
- **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.

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7 Handling and storage

- **Handling**
- **Precautions for safe handling:**
 - Prevent formation of dust.
 - Any deposit of dust which cannot be avoided must be regularly removed.
 - Do not dry clean dust covered objects and floors. Wash thoroughly with plenty of water.
- **Information about protection against explosions and fires:**
 - As the product is supplied it is not capable of dust explosion; however enrichment with fine dust causes risk of dust explosion.
- **Conditions for safe storage, including any incompatibilities**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:**
 - Store away from foodstuffs.
 - Do not store together with acids.
 - Do not store together with alkalis (caustic solutions).
 - Store away from oxidizing agents.
- **Further information about storage conditions:** Keep containers tightly sealed.
- **Specific end use(s)** No relevant information available.

8 Exposure controls/personal protection

- **Control parameters**
- **Components with limit values that require monitoring at the workplace:**
 - The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Exposure controls**
- **General protective and hygienic measures:**
 - The usual precautionary measures for handling chemicals should be followed.
 - Keep away from foodstuffs, beverages and feed.
- **Engineering controls:** No relevant information available.
- **Breathing equipment:**
 - Not required under normal conditions of use.
 - NIOSH or EU approved dust respirator should be used for operations generating dust.
- **Protection of hands:**



Protective gloves

- **Material of gloves**
 - Nitrile rubber, NBR
 - Neoprene gloves
 - Butyl rubber, BR
- **Eye protection:**



Safety glasses

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Follow relevant national guidelines concerning the use of protective eyewear.

- **Body protection:** Protection may be required for spills.
- **Limitation and supervision of exposure into the environment** No special requirements.
- **Risk management measures** No special requirements.

9 Physical and chemical properties

· Information on basic physical and chemical properties

· Appearance:

Form: Powder
Color: Bluish-grey.

· Odor: Odorless
· Odor threshold: Not determined.

· pH-value: Not applicable.
· Melting point/Melting range: 419 °C (786.2 °F)
· Boiling point/Boiling range: 908 °C (1666.4 °F)

· Flash point: The product is not flammable.

· Flammability (solid, gaseous): May form combustible dust concentrations in air.

· Auto-ignition temperature: Not determined.

· Decomposition temperature: Not determined.

· Danger of explosion: Can pose a dust explosion hazard if dispersed in air.

· Explosion limits

Lower: Not determined.
Upper: Not determined.

· Oxidizing properties: Non-oxidizing.

· Vapor pressure: Not determined.

· Density at 20 °C (68 °F): 7.14 g/cm³ (59.58 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 relevant information available.

10 Stability and reactivity

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- **Reactivity:** No relevant information available.
- **Chemical stability:** Stable under normal temperatures and pressures.
- **Thermal decomposition / conditions to be avoided:**
No decomposition if used and stored according to specifications.
- **Possibility of hazardous reactions**
Reacts with steam releasing flammable gases (hydrogen).
Contact with acids releases flammable gases.
Reacts with strong alkali.
Exothermic reaction with acids.
Reacts with strong oxidizing agents.
- **Conditions to avoid** No relevant information available.
- **Incompatible materials**
Acids.
Alkalies
Oxidizing agents
- **Hazardous decomposition products**
Under fire conditions only:
Possible in traces.

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:** Based on available data, the classification criteria are not met.
- **LD/LC50 values that are relevant for classification:** None.
- **Primary irritant effect:**
- **On the skin:** Based on available data, the classification criteria are not met.
- **On the eye:** Based on available data, the classification criteria are not met.
- **Sensitization:** Based on available data, the classification criteria are not met.

· IARC (International Agency for Research on Cancer):
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Substance is not listed.

· NTP (National Toxicology Program):

Substance is not listed.

· OSHA-Ca (Occupational Safety & Health Administration):

Substance is not listed.

- **Probable route(s) of exposure:**

Ingestion.
Inhalation.
Eye contact.
Skin contact.

- **Acute effects (acute toxicity, irritation and corrosivity):** No relevant information available.
- **Repeated dose toxicity:** No relevant information available.
- **Germ cell mutagenicity:** Based on available data, the classification criteria are not met.
- **Carcinogenicity:** Based on available data, the classification criteria are not met.
- **Reproductive toxicity:** Based on available data, the classification criteria are not met.
- **STOT-single exposure:** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure:** Based on available data, the classification criteria are not met.

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- **Aspiration hazard:** Based on available data, the classification criteria are not met.

12 Ecological information

- **Toxicity**
- **Aquatic toxicity** Very toxic to aquatic life with long lasting effects.
- **Persistence and degradability** No relevant information available.
- **Bioaccumulative potential:** No relevant information available.
- **Mobility in soil:** No relevant information available.
- **Ecotoxical effects:**
- **Remark:** Very toxic for fish
- **Additional ecological information**
- **General notes:**
Do not allow product to reach ground water, water course or sewage system.
Very toxic for aquatic organisms
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No relevant information available.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**
The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes.
- **Uncleaned packagings**
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

- | | |
|-------------------------------------|--|
| · UN-Number | |
| · DOT | Not regulated. |
| · ADR/RID/ADN, IMDG, IATA | UN3077 |
| · UN proper shipping name | |
| · DOT | Not regulated. |
| · ADR/RID/ADN, IMDG, IATA | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (zinc powder) |
| · Transport hazard class(es) | |
| · DOT | |
| · Class | Not regulated. |

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· **ADR/RID/ADN**



· **Class** 9 (M7)
 · **Label** 9

· **IMDG**



· **Class** 9
 · **Label** 9

· **IATA**



· **Class** 9
 · **Label** 9

· **Packing group**

· **DOT** Not regulated.
 · **ADR/RID/ADN, IMDG, IATA** III

· **Environmental hazards** Not applicable.

· **Special precautions for user**

Warning: Miscellaneous dangerous substances and articles
 · **Danger code (Kemler):** 90
 · **EMS Number:** F-A,S-F

· **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**

Not applicable.

· **Transport/Additional information:**

· **DOT**
 · **Hazardous substance:** 1000 lbs, 454 kg

15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **United States (USA)**
- **SARA**

· **Section 302 (extremely hazardous substances):**

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Substance is not listed.

• **Section 355 (extremely hazardous substances):**

Substance is not listed.

• **Section 313 (Specific toxic chemical listings):**

Substance is listed.

• **TSCA (Toxic Substances Control Act)**

Substance is listed.

• **Proposition 65 (California)**

• **Chemicals known to cause cancer:**

Substance is not listed.

• **Chemicals known to cause developmental toxicity for females:**

Substance is not listed.

• **Chemicals known to cause developmental toxicity for males:**

Substance is not listed.

• **Chemicals known to cause developmental toxicity:**

Substance is not listed.

• **EPA (Environmental Protection Agency):**

D, I, II

• **IARC (International Agency for Research on Cancer):**

Substance is not listed.

• **Canadian Domestic Substances List (DSL) (Substances not listed.):**

Substance is listed.

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.

• **Abbreviations and acronyms:**

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

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

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bio-accumulable, Toxic

vPvB: very Persistent and very Bioaccumulative

OSHA: Occupational Safety & Health Administration

• **Sources**

Website, European Chemicals Agency (echa.europa.eu)

Website, US EPA Substance Registry Services (ofmpub.epa.gov/sor internet/registry/substreg/home/overview/home.do)

Website, Chemical Abstracts Registry, American Chemical Society (www.cas.org)

Patty's Industrial Hygiene, 6th ed., Rose, Vernon, ed. ISBN: 978-0-470-07488-6

Casarett and Doull's Toxicology: The Basic Science of Poisons, 8th Ed., Klaasen, Curtis D., ed., ISBN:

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Safety Data Sheets, Individual Manufacturers

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