

# Safety Data Sheet

according to 29CFR1910/1200 and GHS Rev. 3

Effective date : 10.24.2014

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## Zinc Nitrate, 0.1M

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

**Product name:** Zinc Nitrate, 0.1M

**Manufacturer/Supplier Trade name:**

**Manufacturer/Supplier Article number:** S25901

**Recommended uses of the product and restrictions on use:**

**Manufacturer Details:**

AquaPhoenix Scientific, Inc  
9 Barnhart Drive, Hanover, PA 17331  
(717) 632-1291

**Supplier Details:**

Fisher Science Education  
6771 Silver Crest Road, Nazareth, PA 18064  
(724)517-1954

**Emergency telephone number:**

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

### SECTION 2: Hazards identification

**Classification of the substance or mixture:**



**Irritant**

Skin irritation, category 2  
Eye irritation, category 2A  
Specific target organ toxicity following single exposure, category 3



**Oxidizing**

Oxidizing solids, category 3

Oxidizing Solids 2.  
Skin Irrit. 2.  
Eye Irrit. 2A.  
STOT SE 3.

**Signal word:** Danger

**Hazard statements:**

May intensify fire; oxidizer.  
Causes skin irritation.  
Causes serious eye irritation.  
May cause respiratory irritation.

**Precautionary statements:**

If medical advice is needed, have product container or label at hand.  
Keep out of reach of children.  
Read label before use.  
Keep away from heat/sparks/open flames/hot surfaces. No smoking.  
Keep/Store away from clothing/combustible materials.  
Take any precaution to avoid mixing with combustibles.  
Wear protective gloves/protective clothing/eye protection/face protection.

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Wash skin thoroughly after handling.  
Wear protective gloves/protective clothing/eye protection/face protection.  
Avoid breathing dust/fume/gas/mist/vapours/spray.  
Use only outdoors or in a well-ventilated area.  
In case of fire: Use agents recommended in section 5 for extinction.  
IF ON SKIN: Wash with soap and water.  
Specific treatment (see supplemental first aid instructions on this label).  
If skin irritation occurs: Get medical advice/attention.  
Take off contaminated clothing and wash before reuse.  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do.  
Continue rinsing.  
If eye irritation persists get medical advice/attention.  
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
Call a POISON CENTER or doctor/physician if you feel unwell.  
Store in a well ventilated place. Keep container tightly closed.  
Store locked up.  
Dispose of contents and container as instructed in Section 13.

**Other Non-GHS Classification:** None

### SECTION 3: Composition/information on ingredients

Ingredients:		
CAS 7732-18-5	Deionized Water	97.03 %
CAS 7779-88-9	Zinc Nitrate, ACS (6H2O)	2.97 %
Percentages are by weight		

### SECTION 4: First aid measures

#### Description of first aid measures

##### After inhalation:

Move exposed individual to fresh air. Loosen clothing as necessary and position individual in a comfortable position. Seek medical attention.

##### After skin contact:

Wash affected area with soap and water. Rinse thoroughly. Seek medical attention.

##### After eye contact:

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

##### After swallowing:

Rinse mouth thoroughly. Do not induce vomiting. Have exposed individual drink sips of water. Immediately seek medical attention.

#### Most important symptoms and effects, both acute and delayed:

Irritation. Nausea. Headache. Shortness of breath.

#### Indication of any immediate medical attention and special treatment needed:

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

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### 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.

**Unsuitable extinguishing agents:** None

#### 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 eyewear, gloves, and clothing. Refer to Section 8.

**Additional information (precautions):** None

### SECTION 6: Accidental release measures

#### Personal precautions, protective equipment and emergency procedures:

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

#### Environmental precautions:

Prevent from reaching drains, sewer or waterway. Collect contaminated soil for characterization per Section 13.

#### Methods and material for containment and cleaning up:

If in a laboratory setting, follow Chemical Hygiene Plan procedures. Collect liquids using vacuum or by use of absorbents. Place into properly labeled containers for recovery or disposal. If necessary use trained response staff or contractor.

**Reference to other sections:** None

### SECTION 7: Handling and storage

#### Precautions for safe handling:

Prevent formation of aerosols. Follow good hygiene procedures when handling chemical materials. Do not eat, drink, smoke, or use personal products when handling chemical substances. If in a laboratory setting, follow Chemical Hygiene Plan. Use only in well ventilated areas. Avoid splashes or spray in enclosed areas.

#### Conditions for safe storage, including any incompatibilities:

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

### SECTION 8: Exposure controls/personal protection



#### Control Parameters:

No applicable occupational exposure limits.

#### Appropriate Engineering controls:

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use/handling. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapor or mists below the applicable workplace exposure limits (Occupational Exposure Limits-OELs) indicated above.

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<b>Respiratory protection:</b>	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.
<b>Protection of skin:</b>	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.
<b>Eye protection:</b>	Safety glasses with side shields or goggles. Wear equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).
<b>General hygienic measures:</b>	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

<b>Appearance (physical state, color):</b>	Clear, colorless liquid	<b>Explosion limit lower:</b>	Not Determined
		<b>Explosion limit upper:</b>	Not Determined
<b>Odor:</b>	Odorless	<b>Vapor pressure at 20°C:</b>	2.3 kPa at 20°C
<b>Odor threshold:</b>	Not Determined	<b>Vapor density:</b>	0.62 (Air = 1)
<b>pH-value:</b>	Not Determined	<b>Relative density:</b>	1 (Water = 1)
<b>Melting/Freezing point:</b>	Approximately 0°C	<b>Solubilities:</b>	Soluble in water
<b>Boiling point/Boiling range:</b>	Approximately 100°C	<b>Partition coefficient (n-octanol/water):</b>	Not Determined
<b>Flash point (closed cup):</b>	Not Determined	<b>Auto/Self-ignition temperature:</b>	Not Determined
<b>Evaporation rate:</b>	Not Determined	<b>Decomposition temperature:</b>	Not Determined
<b>Flammability (solid, gaseous):</b>	Not Determined	<b>Viscosity:</b>	a. Kinematic: Not Determined b. Dynamic: 0.952 mPas at 20 °C
<b>Density at 20°C:</b>	Not Determined		

### SECTION 10: Stability and reactivity

#### Reactivity:

Reacts with metallic powders.

#### Chemical stability:

Stable under normal conditions.

**Possible hazardous reactions:** None

#### Conditions to avoid:

Incompatible materials. Excessive heat. Combustible materials. Reducing agents.

#### Incompatible materials:

Metal powders, cyanides, sodium hypophosphite, stannous chloride, phosphorous, thiocyanates, carbon, metallic sulfides, sulfur, organic materials. May react with reducing agents and combustible materials at elevated temperatures.

#### Hazardous decomposition products:

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Zinc or zinc oxides. Nitrogen or nitrogen oxides.

#### SECTION 11: Toxicological information

##### Acute Toxicity:

###### Oral:

7779-88-6 LD50 Oral - Rat - 1,190 mg/kg

**Chronic Toxicity:** No additional information.

##### Skin corrosion/irritation:

10196-18-6 Skin - Rabbit Result : Severe skin irritation - 24 h

##### Serious eye damage/irritation:

10196-18-6 Eyes - Rabbit Result : Moderate eye irritation - 24 h

**Respiratory or skin sensitization:** No additional information.

**Carcinogenicity:** See section 15.

**Germ cell mutagenicity:** No additional information.

**Reproductive Toxicity:** No additional information.

##### STOT-single and repeated exposure:

10196-18-6: Inhalation - May cause respiratory irritation.

**Additional toxicological information:** No additional information.

#### SECTION 12: Ecological information

**Ecotoxicity:** No additional information.

**Persistence and degradability:** No additional information.

**Bioaccumulative potential:** No additional information.

**Mobility in soil:** No additional information.

**Other adverse effects:** No additional information.

#### 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

##### US DOT

##### UN Number:

ADR, ADN, DOT, IMDG, IATA

Not Regulated.

##### Limited Quantity Exception:

None

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**Bulk:**

**RQ (if applicable):** None

**Proper shipping Name:** Not Regulated.

**Hazard Class:** None

**Packing Group:** Not Regulated.

**Marine Pollutant (if applicable):** No additional information.

**Comments:** None

**Non Bulk:**

**RQ (if applicable):** None

**Proper shipping Name:** Not Regulated.

**Hazard Class:** None

**Packing Group:** Not Regulated.

**Marine Pollutant (if applicable):** No additional information.

**Comments:** None

### SECTION 15: Regulatory information

#### United States (USA)

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

Reactive, Acute, Chronic

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

10196-18-6 Zinc nitrate hexahydrate.

**RCRA (hazardous waste code):**

None of the ingredients are listed.

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

All ingredients are listed.

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

None of the ingredients are listed.

#### Proposition 65 (California):

**Chemicals known to cause cancer:**

None of the ingredients are listed.

**Chemicals known to cause reproductive toxicity for females:**

None of the ingredients are listed.

**Chemicals known to cause reproductive toxicity for males:**

None of the ingredients are listed.

**Chemicals known to cause developmental toxicity:**

None of the ingredients are listed.

#### Canada

**Canadian Domestic Substances List (DSL):**

All ingredients are listed.

### 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

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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.

**NFPA:** 1-0-1

**HMIS:** 1-0-1

**GHS Full Text Phrases:** None

#### Abbreviations and Acronyms:

IMDG International Maritime Code for Dangerous Goods.  
IATA International Air Transport Association.  
GHS Globally Harmonized System of Classification and Labelling of Chemicals.  
ACGIH American Conference of Governmental Industrial Hygienists.  
CAS Chemical Abstracts Service (division of the American Chemical Society).  
NFPA National Fire Protection Association (USA).  
HMIS Hazardous Materials Identification System (USA).  
WHMIS Workplace Hazardous Materials Information System (Canada).  
DNEL Derived No-Effect Level (REACH).  
PNEC Predicted No-Effect Concentration (REACH).  
CFR Code of Federal Regulations (USA).  
SARA Superfund Amendments and Reauthorization Act (USA).  
RCRA Resource Conservation and Recovery Act (USA).  
TSCA Toxic Substances Control Act (USA).  
NPRI National Pollutant Release Inventory (Canada).  
DOT US Department of Transportation.

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