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

Product name: Potassium Nitrite, Reagent

Manufacturer/Supplier Trade name: AquaPhoenix Scientific

Manufacturer/Supplier Article number: S25495

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:

- Oxidizing
  Oxidizing solids, category 2

- Irritant
  Acute toxicity (oral, dermal, inhalation), category 3

- Environmentally Damaging
  Acute hazards to the aquatic environment, category 1
  Chronic hazards to the aquatic environment, category 1

Oxid. Sol 2
AcTox. Oral 3
Aq. AcTox. 1
Aq. ChrTox. 1

Signal word: Danger

Hazard statements:
May intensify fire; oxidizer
Toxic if swallowed
Very toxic 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
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
Safety Data Sheet
according to 29CFR1910/1200 and GHS Rev. 3

Effective date: 02.12.2015

Potassium Nitrite, Reagent

Wash skin thoroughly after handling
Do not eat, drink or smoke when using this product
Avoid release to the environment
Wear protective gloves/protective clothing/eye protection/face protection
IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
Rinse mouth
Specific treatment (see supplemental first aid instructions on this label)
In case of fire: Use agents recommended in section 5 for extinction
Collect spillage

Other Non-GHS Classification:

WHMIS
NFPA/HMIS

NFPA SCALE (0-4)
HMIS RATINGS (0-4)

SECTION 3 : Composition/information on ingredients

<table>
<thead>
<tr>
<th>Ingredients:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS 7758-09-0</td>
<td>Potassium nitrite</td>
</tr>
</tbody>
</table>

Percentages are by weight

SECTION 4 : First aid measures

Description of first aid measures

After inhalation: 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. Seek medical assistance if cough or other symptoms appear.

After skin contact: Wash hands and exposed skin with soap and plenty of water. Seek medical attention if irritation persists or if concerned.

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

After swallowing: Immediately seek medical attention. Rinse mouth with water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Seek medical attention if irritation, discomfort, or vomiting persists.

Most important symptoms and effects, both acute and delayed:


Indication of any immediate medical attention and special treatment needed:
SECTION 5 : Firefighting measures

Extinguishing media

Suitable extinguishing agents: Use water, dry chemical, chemical foam, carbon dioxide, or alcohol-resistant foam.

For safety reasons unsuitable extinguishing agents:

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

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:

Sweep up and shovel. 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:

Avoid dust generation. 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.

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: No applicable occupational exposure limits
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 tightly fitting goggles 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 rewearung wash contaminated clothing.

SECTION 9 : Physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance (physical state, color)</td>
<td>Light yellow crystalline</td>
</tr>
<tr>
<td>Explosion limit lower:</td>
<td>Not Determined</td>
</tr>
<tr>
<td>Explosion limit upper:</td>
<td>Not Determined</td>
</tr>
<tr>
<td>Odor:</td>
<td>Not Determined</td>
</tr>
<tr>
<td>Odor threshold:</td>
<td>Not Determined</td>
</tr>
<tr>
<td>pH-value: 7.0 - 10.0 at 50 g/l at 25°C</td>
<td></td>
</tr>
<tr>
<td>Melting/Freezing point:</td>
<td>387°C</td>
</tr>
<tr>
<td>Boiling point/Boiling range:</td>
<td>Not Determined</td>
</tr>
<tr>
<td>Flash point (closed cup):</td>
<td>Not Determined</td>
</tr>
<tr>
<td>Evaporation rate:</td>
<td>Not Determined</td>
</tr>
<tr>
<td>Flammability (solid, gaseous):</td>
<td>Not Determined</td>
</tr>
<tr>
<td>Density:</td>
<td>Not Determined</td>
</tr>
<tr>
<td>Solubilities:</td>
<td>Soluble in water</td>
</tr>
<tr>
<td>Partition coefficient (n-octanol/water):</td>
<td>Not Determined</td>
</tr>
<tr>
<td>Auto/Self-ignition temperature:</td>
<td>510°C</td>
</tr>
<tr>
<td>Decomposition temperature:</td>
<td>Not Determined</td>
</tr>
<tr>
<td>Viscosity:</td>
<td>a. Kinematic: Not Determined</td>
</tr>
<tr>
<td>Density:</td>
<td>b. Dynamic: Not Determined</td>
</tr>
<tr>
<td>Relative density:</td>
<td>1.915 g/cm3</td>
</tr>
<tr>
<td>Density:</td>
<td>Not Determined</td>
</tr>
</tbody>
</table>

7758-09-0: The substance or mixture is classified as oxidizing with the category 2.

SECTION 10 : Stability and reactivity

Reactivity: Nonreactive under normal conditions.
Potassium Nitrite, Reagent

Chemical stability: Stable under normal conditions.
Possible hazardous reactions: None under normal processing.
Conditions to avoid: Dust generation. Incompatible materials.
Incompatible materials: Strong reducing agents, Powdered metals, Strong acids
Hazardous decomposition products: Nitrogen oxides, Potassium oxides

SECTION 11 : Toxicological information

Acute Toxicity:

<table>
<thead>
<tr>
<th>Inhalation:</th>
<th>LC50 Inhalation - mouse - 2 h - 85,000 mg/m3</th>
</tr>
</thead>
<tbody>
<tr>
<td>7758-09-0</td>
<td></td>
</tr>
</tbody>
</table>

Chronic Toxicity: No additional information.

Corrosion Irritation: No additional information.

Sensitization: No additional information.

Single Target Organ (STOT): No additional information.

Numerical Measures: No additional information.

Carcinogenicity: 7758-09-0: 2A - Group 2A: Probably carcinogenic to humans (Potassium nitrite)

Mutagenicity: No additional information.

Reproductive Toxicity:

Reproductive toxicity - rat - Oral Effects on Fertility: Female fertility index (e.g., # females pregnant per # sperm positive females; # females pregnant per # females mated).
Reproductive toxicity - guinea pig - Oral Effects on Newborn: Stillbirth.

SECTION 12 : Ecological information

Ecotoxicity

| 7758-09-0: LC50 - Danio rerio (zebra fish) - 620 mg/l - 96.0 h |
| 7758-09-0: EC50 - Daphnia magna (Water flea) - 215 mg/l - 48 h |

Persistence and degradability:

Bioaccumulative potential:

Mobility in soil:

Other adverse effects:

SECTION 13 : Disposal considerations

Waste disposal recommendations:

Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Dilute with water or milk. 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
1488

UN proper shipping name
Potassium nitrite

Transport hazard class(es)
- Class: 5.1 Oxidizing substances

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, Acute, Chronic
- SARA Section 313 (Specific toxic chemical listings):
  None of the ingredients is listed
- 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):
  None of the ingredients is listed

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%):
  7758-09-0 Potassium nitrite

Created by Global Safety Management, Inc. - Tel: 1-813-435-5161 - www.gsmsds.com
Canadian NPRI Ingredient Disclosure list (limit 1%): 
None of the ingredients is 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 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:

Effective date : 02.12.2015
Last updated : 03.19.2015