

**Safety Data Sheet**

according to 29CFR1910/1200 and GHS Rev. 3

**Initial preparation date:** : 01.31.2015**SMP Buffer****SECTION 1: Identification of the substance/mixture and of the supplier****Product name:** SMP Buffer**Manufacturer/Supplier Article number:** SM9123SS**Recommended uses of the product and restrictions on use:** Laboratory Chemicals**Manufacturer Details:**

AquaPhoenix Scientific, Inc.  
860 Gitts Run Road  
Hanover, PA 17331  
1-717-632-1291

**Emergency telephone number:****ChemTel: (24-hour)**

+1(800)255-3924

+1(813)248-0585 (International)

**SECTION 2: Hazards identification****Classification of the substance or mixture:****Health hazard**

Carcinogenicity, category 1B

Germ cell mutagenicity, category 1B

Specific target organ toxicity following repeated exposure, category 2

**Irritant**

Specific target organ toxicity following single exposure, category 3

STOT RE 2.

STOT SE 3.

Carc. 1B.

Muta. 1B.

Aquatic Acute 3.

Aquatic Chronic 3.

**Signal word:** Danger**Hazard statements:**

May cause cancer.

May cause genetic defects.

May cause damage to organs through prolonged or repeated exposure.

May cause respiratory irritation.

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.

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

Use personal protective equipment as required.

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

Avoid breathing dust/fume/gas/mist/vapors/spray.

**Safety Data Sheet**

according to 29CFR1910/1200 and GHS Rev. 3

**Initial preparation date:** : 01.31.2015**SMP Buffer**

Use only outdoors or in a well-ventilated area.  
 Avoid release to the environment.  
 IF exposed or concerned: Get medical advice/attention.  
 Get Medical advice/attention if you feel unwell.  
 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 locked up.  
 Store in a well ventilated place. Keep container tightly closed.  
 Dispose of contents and container to an approved waste disposal plant.

**Other Non-GHS Classification:** None**SECTION 3: Composition/information on ingredients****Ingredients:**

<b>Ingredients:</b>		
CAS 7732-18-5	Deionized Water	94.959 %
CAS 10043-52-4	Calcium Chloride	4.08 %
CAS 7789-00-6	Potassium Chromate	0.3 %
CAS 102-71-6	Triethanolamine	0.281 %
CAS 5743-26-0	Calcium Acetate	0.2 %
CAS 100-02-7	4-Nitrophenol	0.18 %
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 immediate medical assistance.

**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, if present and easy to do, and continue rinsing. Seek immediate medical assistance.

**After swallowing:**

Rinse mouth with water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Seek immediate medical assistance.

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

Irritation. Shortness of breath. Headache. Nausea. Dizziness.

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

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

**Safety Data Sheet**

according to 29CFR1910/1200 and GHS Rev. 3

Initial preparation date: : 01.31.2015

**SMP Buffer****SECTION 5: Firefighting measures****Extinguishing media****Suitable extinguishing agents:**

Use water, dry chemical, chemical foam, carbon dioxide, or alcohol-resistant foam.

**Unsuitable extinguishing agents:** None**Special hazards arising from the substance or mixture:**

Thermal decomposition can lead to release of irritating gases and vapors. Contains hexavalent chromium compound, a known carcinogen.

**Advice for firefighters:****Protective equipment:**

Wear protective eyewear, 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. If using water, do not allow runoff to enter sewer.

**SECTION 6: Accidental release measures****Personal precautions, protective equipment and emergency procedures:**

Ensure adequate ventilation. Ensure that air-handling systems are operational. Avoid contact with eyes, skin, and clothing.

**Environmental precautions:**

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

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

Wear protective eyewear, gloves, and clothing. 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. Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Refer to Section 8.

**Reference to other sections:** None**SECTION 7: Handling and storage****Precautions for safe handling:**

Avoid contact with skin, eyes and clothing. Follow good hygiene procedures when handling chemical materials. Refer to Section 8. Follow proper disposal methods. Do not eat, drink, smoke, or use personal products when handling chemical substances. Refer to Section 13.

**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**

**Safety Data Sheet**

according to 29CFR1910/1200 and GHS Rev. 3

Initial preparation date: : 01.31.2015

**SMP Buffer**

<b>Control parameters:</b>	7789-00-6, Potassium chromate, ACGIH TLV TWA 0.05 mg/m3. 7789-00-6, Potassium chromate, OSHA PEL TWA 0.005 mg/m3 (regulated carcinogens). 7789-00-6, Potassium chromate, OSHA PEL TWA 0.005 mg/m3 (regulated carcinogens). 102-71-6, Triethanolamine., ACGIH TLV TWA 5 mg/m3.
<b>Appropriate engineering controls:</b>	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. Use under a chemical fume hood.
<b>Respiratory protection:</b>	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>	Wear equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Safety glasses or goggles are appropriate eye protection.
<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 re-wearing, wash contaminated clothing.

**SECTION 9: Physical and chemical properties**

<b>Appearance (physical state, color):</b>	Clear, yellow 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>	14mm Hg
<b>Odor threshold:</b>	Not determined	<b>Vapor density:</b>	0.7
<b>pH-value:</b>	Not determined	<b>Relative density:</b>	Approx. 1.03
<b>Melting/Freezing point:</b>	Approx. 0°C	<b>Solubilities:</b>	Soluble in water.
<b>Boiling point/Boiling range:</b>	Approx. 100°C	<b>Partition coefficient (n-octanol/water):</b>	Not determined
<b>Flash point (closed cup):</b>	Non-Flammable	<b>Auto/Self-ignition temperature:</b>	Not determined
<b>Evaporation rate:</b>	>1	<b>Decomposition temperature:</b>	Not determined
<b>Flammability (solid, gaseous):</b>	Non flammable	<b>Viscosity:</b>	a. Kinematic: Not determined b. Dynamic: Not determined
<b>Density at 20°C:</b>	Not determined		

**SECTION 10: Stability and reactivity****Reactivity:**

Nonreactive under normal conditions.

**Chemical stability:**

Stable under normal conditions.

**Safety Data Sheet**

according to 29CFR1910/1200 and GHS Rev. 3

**Initial preparation date:** : 01.31.2015**SMP Buffer****Possible hazardous reactions:**

None under normal processing.

**Conditions to avoid:**

Incompatible materials.

**Incompatible materials:**

acids. Borane/boron oxides.

**Hazardous decomposition products:**

Fumes of Chromium trioxide.

**SECTION 11: Toxicological information****Acute Toxicity:** No additional information.**Chronic Toxicity:** No additional information.**Skin corrosion/irritation:** No additional information.**Serious eye damage/irritation:**

Calcium Chloride Rabbit: Moderate irritation.

**Respiratory or skin sensitization:**Potassium Chromate -  
Causes skin sensitization.  
>0.5%**Carcinogenicity:****IARC:** : Group 3: Not classifiable as to its carcinogenicity to humans (Triethanolamine)**Germ cell mutagenicity:** No additional information.**Reproductive Toxicity:** No additional information.**STOT-single and repeated exposure:**Potassium Chromate -  
May cause respiratory irritation**Additional toxicological information:**

No additional information.

**SECTION 12: Ecological information****Ecotoxicity:**

Potassium Chromate, fish LC50 - Pimephales promelas (fathead minnow) - 40 mg/l - 96.0 h.

Potassium Chromate, algae EC50 - Nitzschia sp. - 0.26 mg/l - 72 h.

Potassium Chromate, invertebrates EC50 - Daphnia magna (Water flea) - 15 mg/l - 48 h.

**Persistence and degradability:**

No information Available.

**Bioaccumulative potential:**

No information Available.

**Mobility in soil:**

No information Available.

**Other adverse effects:**

**Safety Data Sheet**

according to 29CFR1910/1200 and GHS Rev. 3

**Initial preparation date:** : 01.31.2015**SMP Buffer**

None identified.

**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

**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):**

Acute,Chronic

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

7789-00-6 Potassium chromate.

100-02-7 4-Nitrophenol.

**RCRA (hazardous waste code):**

100-02-7 4-Nitrophenol - U170.

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

All ingredients are listed.

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

7789-00-6 Potassium chromate 10 lb.

100-02-7 4-Nitrophenol 100 lb.

**Proposition 65 (California):**

**Safety Data Sheet**

according to 29CFR1910/1200 and GHS Rev. 3

**Initial preparation date:** : 01.31.2015**SMP Buffer****Chemicals known to cause cancer:**

7789-00-6 Potassium chromate.

**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:**

7789-00-6 Potassium chromate.

**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 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:** 1-0-0**HMIS:** 3-0-0**GHS Full Text Phrases:** None**Abbreviations and Acronyms:** None