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

Product name: Potassium Chromate Indicator Solution, 5% w/v

Manufacturer/Supplier Trade name: ANDPC8025-B

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:
Anderson Chemical Company
325 South David Avenue, Litchfield, MN 55355
(320) 693-2477

Emergency telephone number:
Anderson Chemical Company Emergency Telephone No.: (800) 255-3924

SECTION 2 : Hazards identification

Classification of the substance or mixture:

Environmentally Damaging
Acute hazards to the aquatic environment, category 2
Chronic hazards to the aquatic environment, category 2

Irritant
Skin sensitization, category 1

Health hazard
Germ cell mutagenicity, category 1B
Carcinogenicity, category 1B

Aquatic Acute 2
Aquatic Chronic 2
Skin Sens. 1
Muta. 1B
Carc. 1B

Signal word: Danger

Hazard statements:
Causes skin irritation
May cause an allergic skin reaction
May cause respiratory irritation
May cause genetic defects
May cause cancer
Very toxic to aquatic life with long lasting effects
Very toxic to aquatic life

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
Use personal protective equipment as required
Do not handle until all safety precautions have been read and understood
Contaminated work clothing should not be allowed out of the workplace
Avoid release to the environment
Wear protective gloves/protective clothing/eye protection/face protection
Take off contaminated clothing and wash before reuse
Collect spillage
Wash contaminated clothing before reuse
Specific treatment (see supplemental first aid instructions on this label)
Rinse mouth
IF ON SKIN: Wash with soap and water
IF exposed or concerned: Get medical advice/attention
IF skin irritation or a rash occurs: Get medical advice/attention
Store locked up
Store in a dry place
Dispose of contents/container to ...

**Combustible Dust Hazard:**
May form combustible dust concentrations in air (during processing).

**Other Non-GHS Classification:**

<table>
<thead>
<tr>
<th>WHMIS</th>
<th>NFPA/HMIS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health</td>
<td>2</td>
</tr>
<tr>
<td>Flammability</td>
<td>0</td>
</tr>
<tr>
<td>Physical Hazard</td>
<td>2</td>
</tr>
<tr>
<td>Personal Protection</td>
<td>X</td>
</tr>
</tbody>
</table>

**NFPA SCALE (0-4)**

**HMIS RATINGS (0-4)**

### SECTION 3: Composition/information on ingredients

<table>
<thead>
<tr>
<th>Ingredients:</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS 7789-00-6</td>
</tr>
<tr>
<td>CAS 7732-18-5</td>
</tr>
</tbody>
</table>

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 advice if discomfort or irritation persists. If breathing difficult, give
Potassium Chromate Indicator Solution, 5% w/v

Most important symptoms and effects, both acute and delayed:
Irritation, Nausea, Headache, Shortness of breath.; May cause genetic defects and cancer.

Indication of any immediate medical attention and special treatment needed:
If seeking medical attention, provide SDS document to physician.

SECTION 5 : Firefighting measures

Extinguishing media
Suitable extinguishing agents: If in laboratory setting, follow laboratory fire suppression procedures. Use appropriate fire suppression agents for adjacent combustible materials or sources of ignition. Use water, dry chemical, chemical foam, carbon dioxide, or alcohol-resistant foam.

For safety reasons unsuitable extinguishing agents:
Combustion products may include carbon oxides or other toxic vapors. Thermal decomposition can lead to release of irritating gases and vapors. Avoid generating dust; fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.

Advice for firefighters:
Protective equipment: Use NIOSH-approved respiratory protection/breathing apparatus. Wear protective eyeware, gloves, and clothing. Refer to Section 8.

Additional information (precautions): Move product containers away from fire or keep cool with water spray as a protective measure, where feasible. Use spark-proof tools and explosion-proof equipment. 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:
Wear protective equipment. Transfer to a disposal or recovery container. Ensure adequate ventilation. Ensure that air-handling systems are operational. Use spark-proof tools and explosion-proof equipment. Use respiratory protective device against the effects of fumes/dust/aerosol. Keep away from ignition sources.

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

Methods and material for containment and cleaning up:
If in a laboratory setting, follow Chemical Hygiene Plan procedures. If necessary use trained response staff or contractor. Evacuate personnel to safe areas. Keep in suitable closed containers for disposal. Place into properly labeled containers for recovery or disposal. If necessary, use trained response staff/contractor. Always obey local regulations.
**Reference to other sections:**

### SECTION 7 : Handling and storage

#### Precautions for safe handling:

Wash hands after handling. Avoid contact with skin, eyes, and clothing. Do not eat, drink, smoke, or use personal products when handling chemical substances. 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.

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

Keep away from food and beverages. Provide ventilation for containers. Store away from incompatible materials. Store away from foodstuffs. Store in cool, dry conditions in well sealed containers. Store with like hazards.

### SECTION 8 : Exposure controls/personal protection

#### Control Parameters:

7789-00-6, Potassium chromate, ACGIH TLV TWA 0.005 mg/m³
7789-00-6, Potassium chromate, OSHA PEL TWA 0.005 mg/m³

#### 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 dusts (total/respirable) below the applicable workplace exposure limits (Occupational Exposure Limits-OELs) indicated above. It is recommended that all dust control equipment such as local exhaust ventilation and material transport systems involved in handling of this product contain explosion relief vents or an explosion suppression system or an oxygen deficient environment. Ensure that dust-handling systems (such as exhaust ducts, dust collectors, vessels, and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e., there is no leakage from the equipment). Fume hood is required. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use or handling.

#### Respiratory protection:

Use suitable respiratory protective device when high concentrations are present. Use suitable respiratory protective device when aerosol or mist is formed. For spills, respiratory protection may be advisable. Fume hood is required. When necessary use NIOSH approved breathing equipment.

#### Protection of skin:

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

Safety glasses with side shields or goggles.
GENERAL HYGIENIC MEASURES:

The usual precautionary measures are to be adhered to when handling chemicals. Before wearing wash contaminated clothing. Keep away from food, beverages and feed sources. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Do not inhale gases/fumes/dust/mist/vapor/aerosols. Avoid contact with the eyes and skin. Perform routine housekeeping.

SECTION 9: Physical and chemical properties

<table>
<thead>
<tr>
<th>Appearance (physical state,color):</th>
<th>Clear, yellow liquid</th>
<th>Explosion limit lower:</th>
<th>Not Determined</th>
</tr>
</thead>
<tbody>
<tr>
<td>Odor:</td>
<td>Odorless</td>
<td>Explosion limit upper:</td>
<td>Not Determined</td>
</tr>
<tr>
<td>Odor threshold:</td>
<td>Not Determined</td>
<td>Vapor pressure:</td>
<td>14mmHg @ 20C</td>
</tr>
<tr>
<td>pH-value:</td>
<td>Not Determined</td>
<td>Vapor density:</td>
<td>0.7</td>
</tr>
<tr>
<td>Melting/Freezing point:</td>
<td>Approx 0C</td>
<td>Relative density:</td>
<td>1.03</td>
</tr>
<tr>
<td>Boiling point/Boiling range:</td>
<td>Approx 100C</td>
<td>Partition coefficient (n-octanol/water):</td>
<td>Not Determined</td>
</tr>
<tr>
<td>Flash point (closed cup):</td>
<td>Not Determined</td>
<td>Auto/Self-ignition temperature:</td>
<td>Not Determined</td>
</tr>
<tr>
<td>Evaporation rate:</td>
<td>&gt;1</td>
<td>Decomposition temperature:</td>
<td>Not Determined</td>
</tr>
<tr>
<td>Density:</td>
<td>Not Determined</td>
<td></td>
<td>b. Dynamic: Not Determined</td>
</tr>
</tbody>
</table>

SECTION 10: Stability and reactivity

Reactivity: Nonreactive under normal conditions.
Chemical stability: Oxidizer. Contact with combustible materials may cause fire. No decomposition if used and stored according to specifications. Stable under normal conditions.
Possible hazardous reactions: None under normal processing.
Conditions to avoid: Store away from oxidizing agents, strong acids or bases. Incompatible materials.
Incompatible materials: Organic materials, Powdered metals, Strong acids, Strong bases.
Hazardous decomposition products: Fumes of Chromium trioxide.

SECTION 11: Toxicological information

Acute Toxicity:

| Oral: 180 mg/kg | LD50 Mouse |

Chronic Toxicity: No additional information.

Corrosion Irritation: No additional information.

Sensitization: No additional information.

Single Target Organ (STOT): May cause respiratory irritation.
Numerical Measures: No additional information.

<table>
<thead>
<tr>
<th>Carcinogenicity:</th>
<th>IARC: 1 - Group 1: Carcinogenic to humans (Potassium chromate) NTP: Known to be human carcinogen (Potassium chromate) OSHA: OSHA specifically regulated carcinogen (Potassium chromate)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mutagenicity:</td>
<td>In vivo tests showed mutagenic effects</td>
</tr>
<tr>
<td>Reproductive Toxicity:</td>
<td>No additional information.</td>
</tr>
</tbody>
</table>

SECTION 12: Ecological information

Ecotoxicity
- **Fish**: LC50 - Pimephales promelas (fathead minnow) - 40 mg/l - 96.0 h
- **Invertebrates**: EC50 - Daphnia magna (Water flea) - 15 mg/l - 48 h
- **Algae**: EC50 - Nitzschia sp. - 0.26 mg/l - 72 h

Persistence and degradability: Not readily biodegradable.

Bioaccumulative potential:

Mobility in soil:

Other adverse effects:

SECTION 13: Disposal considerations

Waste disposal recommendations:
Do not allow product to reach sewage system or open water. It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities (US 40CFR262.11). Consult federal state/provincial and local regulations regarding the proper disposal of waste material that may incorporate some amount of this product. Contact a licensed professional waste disposal service to dispose of this material. Dispose of empty containers as unused product. 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
- Not Regulated.

UN proper shipping name
- Not Regulated.

Transport hazard class(es)
- Not Regulated.

Packing group:

Environmental hazard: Marine pollutant

Transport in bulk:

Special precautions for user:

SECTION 15: Regulatory information

United States (USA)
Potassium Chromate Indicator Solution, 5% w/v

SARA Section 311/312 (Specific toxic chemical listings):
None of the ingredients is listed

SARA Section 313 (Specific toxic chemical listings):
7789-00-6 Potassium chromate

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):
7789-00-6 Potassium chromate 40 lbs

Proposition 65 (California):
Chemicals known to cause cancer:
7789-00-6 Potassium chromate

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:
7789-00-6 Potassium chromate

Canada

Canadian Domestic Substances List (DSL):
All ingredients are listed.

Canadian NPRI Ingredient Disclosure list (limit 0.1%):
None of the ingredients is listed

Canadian NPRI Ingredient Disclosure list (limit 1%):
7789-00-6 Potassium chromate

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. 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:
IMDG: International Maritime Code for Dangerous Goods
PNEC: Predicted No-Effect Concentration (REACH)
CFR: Code of Federal Regulations (USA)
Potassium Chromate Indicator Solution, 5% w/v

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
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
IATA: International Air Transport Association
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)
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
TSCA: Toxic Substances Control Act (USA)
NPRI: National Pollutant Release Inventory (Canada)
DOT: US Department of Transportation
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)

Effective date: 01.26.2015
Last updated: 06.02.2015