SECTION 1: Identification

1.1. Identification

Product form : Mixtures
Product name : Potassium Dichromate, 0.1N (0.0167M)
Product code : LC18980

1.2. Recommended use and restrictions on use

Use of the substance/mixture : For laboratory and manufacturing use only.
Recommended use : Laboratory chemicals
Restrictions on use : Not for food, drug or household use

1.3. Supplier

LabChem Inc
Jackson's Pointe Commerce Park Building 1000, 1010 Jackson's Pointe Court
Zelienople, PA 16063 - USA
T 412-826-5230 - F 724-473-0647
info@labchem.com - www.labchem.com

1.4. Emergency telephone number

Emergency number : CHEMTREC: 1-800-424-9300 or 011-703-527-3887

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS-US classification
Respiratory sensitization, Category 1 : H334 - May cause an allergy or asthma symptoms or breathing difficulties if inhaled
Skin sensitization, Category 1 : H317 - May cause an allergic skin reaction
Germ cell mutagenicity Category 1B : H340 - May cause genetic defects
Carcinogenicity Category 1B : H350 - May cause cancer
Reproductive toxicity Category 1B : H360 - May damage fertility or the unborn child

Full text of H statements : see section 16

2.2. GHS Label elements, including precautionary statements

GHS-US labeling
Hazard pictograms (GHS-US) : 

Signal word (GHS-US) : Danger
Hazard statements (GHS-US) : H317 - May cause an allergic skin reaction
H334 - May cause an allergy or asthma symptoms or breathing difficulties if inhaled
H340 - May cause genetic defects
H350 - May cause cancer
H360 - May damage fertility or the unborn child

Precautionary statements (GHS-US) : P201 - Obtain special instructions before use.
P202 - Do not handle until all safety precautions have been read and understood.
P261 - Avoid breathing mist.
P272 - Contaminated work clothing should not be allowed out of the workplace.
P280 - Wear protective gloves, protective clothing, eye protection, face protection.
P284 - Wear respiratory protection.
P302+P352 - IF ON SKIN: Wash with plenty of soap and water.
P304+P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P308+P313 - IF exposed or concerned: Get medical advice/attention.
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.
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P342+P311 - If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.
P362+P364 - Take off contaminated clothing and wash it before reuse.
P405 - Store locked up.
P501 - Dispose of contents/container to comply with local, state and federal regulations

2.3. Other hazards which do not result in classification
Other hazards not contributing to the classification: None under normal conditions.

2.4. Unknown acute toxicity (GHS US)
Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances
Not applicable

3.2. Mixtures

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
<th>GHS-US classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>(CAS-No.) 7732-18-5</td>
<td>99.5</td>
<td>Not classified</td>
</tr>
<tr>
<td>Potassium Dichromate</td>
<td>(CAS-No.) 7778-50-9</td>
<td>0.5</td>
<td>Ox. Sol. 2, H272, Acute Tox. 3 (Oral), H301, Acute Tox. 4 (Dermal), H312, Acute Tox. 2 (Inhalation), H330, Skin Corr. 1B, H314, Resp. Sens. 1, H334, Skin Sens. 1, H317, Mut. 1B, H340, Carc. 1B, H350, Repr. 1B, H360, STOT RE 1, H372, Aquatic Acute 1, H400, Aquatic Chronic 1, H410</td>
</tr>
</tbody>
</table>

Full text of hazard classes and H-statements: see section 16

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures general: Never give anything by mouth to an unconscious person. IF exposed or concerned: Get medical advice/attention.

First-aid measures after inhalation: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.

First-aid measures after skin contact: Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

First-aid measures after eye contact: Rinse immediately with plenty of water. If pain, blinking or redness persists, obtain medical attention if pain, blinking or redness persists.

First-aid measures after ingestion: Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects: May cause genetic defects. May cause cancer. May damage fertility or the unborn child.

Symptoms/effects after inhalation: May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction.

4.3. Immediate medical attention and special treatment, if necessary

Obtain medical assistance.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media: Foam, Dry powder, Carbon dioxide, Water spray, Sand.

Unsuitable extinguishing media: Do not use a heavy water stream.

5.2. Specific hazards arising from the chemical

No additional information available

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.
Potassium Dichromate, 0.1N (0.0167M)

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Protection during firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel
Protective equipment: Safety glasses. Gloves.
Emergency procedures: Evacuate unnecessary personnel.

6.1.2. For emergency responders
Protective equipment: Equip cleanup crew with proper protection.
Emergency procedures: Ventilate area.

6.2. Environmental precautions
Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters. Avoid release to the environment.

6.3. Methods and material for containment and cleaning up
Methods for cleaning up: Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

6.4. Reference to other sections
See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling
Precautions for safe handling: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor. Avoid breathing mist. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Eliminate all ignition sources if safe to do so.

Hygiene measures: Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities
Storage conditions: Keep container closed when not in use.
Incompatible materials: Sources of ignition. Direct sunlight.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

<table>
<thead>
<tr>
<th>Substance</th>
<th>ACGIH TWA (mg/m³)</th>
<th>OSHA PEL (TWA) (mg/m³)</th>
<th>IDLH (mg/m³)</th>
<th>NIOSH REL (TWA) (mg/m³)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potassium Dichromate</td>
<td>0.05 mg/m³ as Cr</td>
<td>0.005 mg/m³ as Cr(VI)</td>
<td>15 mg/m³ as Cr(VI)</td>
<td>0.001 mg/m³ as Cr</td>
</tr>
<tr>
<td>Water</td>
<td>Not applicable</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

8.2. Appropriate engineering controls
Appropriate engineering controls: Emergency eye wash fountains should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation. Material should be handled in a laboratory hood whenever possible.
8.3. Individual protection measures/Personal protective equipment

Personal protective equipment:

Hand protection:
Wear protective gloves.

Eye protection:
Chemical goggles or safety glasses

Respiratory protection:
In case of inadequate ventilation wear respiratory protection. Gas mask

Other information:
Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

- Physical state: Liquid
- Color: orange
- Odor: None.
- Odor threshold: No data available
- pH: No data available
- Melting point: No data available
- Freezing point: No data available
- Boiling point: No data available
- Flash point: No data available
- Relative evaporation rate (butyl acetate=1): No data available
- Flammability (solid, gas): Non flammable.
- Vapor pressure: No data available
- Relative vapor density at 20 °C: No data available
- Relative density: No data available
- Specific gravity / density: 1 g/ml
- Solubility: Soluble in water.
- Log Pow: No data available
- Auto-ignition temperature: No data available
- Decomposition temperature: No data available
- Viscosity, kinematic: 1 cSt
- Viscosity, dynamic: No data available
- Explosive properties: No data available
- Oxidizing properties: No data available

9.2. Other information
No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity
No additional information available
10.2. Chemical stability
Stable under normal conditions.

10.3. Possibility of hazardous reactions
Not established.

10.4. Conditions to avoid
Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials
Strong reducing agents. Combustible materials.

10.6. Hazardous decomposition products
Contains hexavalent chromium.

SECTION 11: Toxicological information

11.1. Information on toxicological effects
Likely routes of exposure : Skin and eye contact
Acute toxicity : Not classified

<table>
<thead>
<tr>
<th>Potassium Dichromate, 0.1N (0.0167M)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 oral rat</td>
</tr>
<tr>
<td>5000 mg/kg</td>
</tr>
<tr>
<td>LC50 inhalation rat (mg/l)</td>
</tr>
<tr>
<td>18 mg/l/4h</td>
</tr>
<tr>
<td>ATE US (oral)</td>
</tr>
<tr>
<td>5000 mg/kg body weight</td>
</tr>
<tr>
<td>ATE US (vapors)</td>
</tr>
<tr>
<td>18 mg/l/4h</td>
</tr>
<tr>
<td>ATE US (dust, mist)</td>
</tr>
<tr>
<td>18 mg/l/4h</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Potassium Dichromate (7778-50-9)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 oral rat</td>
</tr>
<tr>
<td>25 mg/kg</td>
</tr>
<tr>
<td>LD50 dermal rabbit</td>
</tr>
<tr>
<td>1150 mg/kg</td>
</tr>
<tr>
<td>LC50 inhalation rat (mg/l)</td>
</tr>
<tr>
<td>0.09 mg/l/4h</td>
</tr>
<tr>
<td>ATE US (oral)</td>
</tr>
<tr>
<td>25 mg/kg body weight</td>
</tr>
<tr>
<td>ATE US (dermal)</td>
</tr>
<tr>
<td>1150 mg/kg body weight</td>
</tr>
<tr>
<td>ATE US (gases)</td>
</tr>
<tr>
<td>100 ppmV/4h</td>
</tr>
<tr>
<td>ATE US (vapors)</td>
</tr>
<tr>
<td>0.09 mg/l/4h</td>
</tr>
<tr>
<td>ATE US (dust, mist)</td>
</tr>
<tr>
<td>0.09 mg/l/4h</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Water (7732-18-5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 oral rat</td>
</tr>
<tr>
<td>≥ 90000 mg/kg</td>
</tr>
<tr>
<td>ATE US (oral)</td>
</tr>
<tr>
<td>90000 mg/kg body weight</td>
</tr>
</tbody>
</table>

Skin corrosion/irritation : Not classified
Serious eye damage/irritation : Not classified
Respiratory or skin sensitization : May cause an allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction.
Germ cell mutagenicity : May cause genetic defects.
Carcinogenicity : May cause cancer.

10.7. In OSHA Specifically Regulated Carcinogen list : Yes

Reproductive toxicity : May damage fertility or the unborn child.
Specific target organ toxicity – single exposure : Not classified
Specific target organ toxicity – repeated exposure : Not classified
Aspiration hazard : Not classified
Potential Adverse human health effects and symptoms : Based on available data, the classification criteria are not met.
Symptoms/effects after inhalation : May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction.
SECTION 12: Ecological information

12.1. Toxicity
Ecology - water : Toxic to aquatic life.

Potassium Dichromate, 0.1N (0.0167M)
EC50 Daphnia 1 280 mg/l 48 h

Potassium Dichromate (7778-50-9)
LC50 fish 1 12.3 mg/l 96 hr.
EC50 Daphnia 1 1.4 mg/l 24 hr.

12.2. Persistence and degradability
Potassium Dichromate, 0.1N (0.0167M)
Persistence and degradability : Not readily biodegradable in water.

Potassium Dichromate (7778-50-9)
Persistence and degradability : Not established.

Water (7732-18-5)
Persistence and degradability : Not established.

12.3. Bioaccumulative potential
Potassium Dichromate, 0.1N (0.0167M)
Bioaccumulative potential : Not established.

Potassium Dichromate (7778-50-9)
Bioaccumulative potential : Not established.

Water (7732-18-5)
Bioaccumulative potential : Not established.

12.4. Mobility in soil
No additional information available

12.5. Other adverse effects
Other information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Disposal methods
Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to comply with local, state and federal regulations.

Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

Department of Transportation (DOT)
In accordance with DOT
Not regulated

SECTION 15: Regulatory information

15.1. US Federal regulations
Potassium Dichromate, 0.1N (0.0167M)
SARA Section 311/312 Hazard Classes Immediate (acute) health hazard
Delayed (chronic) health hazard

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

Chemical(s) subject to the reporting requirements of Section 313 or Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372.

Potassium Dichromate CAS-No. 7778-50-9 0.5%
Potassium Dichromate, 0.1N (0.0167M)
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according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

<table>
<thead>
<tr>
<th>Potassium Dichromate (7778-50-9)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RQ (Reportable quantity, section 304 of EPA's List of Lists)</td>
</tr>
<tr>
<td>SARA Section 311/312 Hazard Classes</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

15.2. International regulations

**CANADA**

Potassium Dichromate (7778-50-9)
Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations
No additional information available

National regulations

Potassium Dichromate (7778-50-9)
Listed on the Canadian IDL (Ingredient Disclosure List)

15.3. US State regulations

This product can expose you to Potassium Dichromate, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Potassium Dichromate (7778-50-9)

<table>
<thead>
<tr>
<th>U.S. - California - Proposition 65 - Carcinogens List</th>
<th>U.S. - California - Proposition 65 - Developmental Toxicity</th>
<th>U.S. - California - Proposition 65 - Reproductive Toxicity - Female</th>
<th>U.S. - California - Proposition 65 - Reproductive Toxicity - Male</th>
<th>No significant risk level (NSRL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No significant risk level (NSRL)</td>
</tr>
</tbody>
</table>

SECTION 16: Other information

Revision date : 01/31/2018
Other information : None.

Full text of H-phrases: see section 16:

| H272 | May intensify fire; oxidizer |
| H301 | Toxic if swallowed |
| H312 | Harmful in contact with skin |
| H314 | Causes severe skin burns and eye damage |
| H317 | May cause an allergic skin reaction |
| H330 | Fatal if inhaled |
| H334 | May cause an allergy or asthma symptoms or breathing difficulties if inhaled |
| H340 | May cause genetic defects |
| H350 | May cause cancer |
| H360 | May damage fertility or the unborn child |
| H372 | Causes damage to organs through prolonged or repeated exposure |
| H400 | Very toxic to aquatic life |
| H410 | Very toxic to aquatic life with long lasting effects |
## Potassium Dichromate, 0.1N (0.0167M)

### Safety Data Sheet

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<table>
<thead>
<tr>
<th>Hazard Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>NFPA health hazard</td>
<td>2 - Materials that, under emergency conditions, can cause temporary incapacitation or residual injury.</td>
</tr>
<tr>
<td>NFPA fire hazard</td>
<td>0 - Materials that will not burn under typical dire conditions, including intrinsically noncombustible materials such as concrete, stone, and sand.</td>
</tr>
<tr>
<td>NFPA reactivity</td>
<td>0 - Material that in themselves are normally stable, even under fire conditions.</td>
</tr>
</tbody>
</table>

### Hazard Rating

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health</td>
<td>2 Moderate Hazard - Temporary or minor injury may occur</td>
</tr>
<tr>
<td></td>
<td>* - Chronic (long-term) health effects may result from repeated overexposure</td>
</tr>
<tr>
<td>Flammability</td>
<td>0 Minimal Hazard - Materials that will not burn</td>
</tr>
<tr>
<td>Physical</td>
<td>0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives.</td>
</tr>
<tr>
<td>Personal protection</td>
<td>G - Safety glasses, Gloves, Vapor respirator</td>
</tr>
</tbody>
</table>

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