according to 29CFR1910/1200 and GHS Rev. 3

Initial preparation date: : 01.26.2015

Chromate Indicator Reagent

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

Product name: Chromate Indicator Reagent

Manufacturer/Supplier Article number: AR-1019-60 EW

Recommended uses of the product and restrictions on use: Laboratory

Manufacturer Details:

Aqua Analytics 39555 Orchard Hill Place, Suite 600, Novi, MI 48375 (888) 712-4000

Emergency telephone number:

Emergency Telephone No.: (800) 424-9300

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.

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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.

Other Non-GHS Classification: None

SECTION 3: Composition/information on ingredients

Ingredients:

Ingredients:		
CAS 7789-00-6	Potassium Chromate	5 %
CAS 7732-18-5	Deionized Water	95 %
		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 oxygen. Move exposed to fresh air. Give artificial respiration if necessary. If breathing is difficult give oxygen. Get medical assistance if cough or other symptoms appear.

After skin contact:

Wash affected area with soap and water. Rinse/flush exposed skin gently using water for 15-20 minutes. Seek medical advice if discomfort or irritation persists. 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. Remove contact lens(es) if able to do so during rinsing. Seek immediate medical attention or advice. Remove contact lenses, if present and easy to do, and continue rinsing. Seek medical attention if irritation persists or if concerned.

After swallowing:

Rinse mouth thoroughly. Do not induce vomiting. Have exposed individual drink sips of water. Seek medical attention if irritation, discomfort or vomiting persists. Rinse mouth thoroughly. Never give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and delayed:

Irritation. Nausea. Headache. Shortness of breath. May cause genetic defects and cancer.

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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.

Unsuitable extinguishing agents: None

Special hazards arising from the substance or mixture:

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: None

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.

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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 re-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 gase and plain. Perform restricts have been income.

with the eyes and skin. Perform routine housekeeping.

SECTION 9: Physical and chemical properties

Appearance (physical state, color):	Clear, yellow liquid		Not determined Not determined
Odor:	Odorless	Vapor pressure at 20°C:	14 mmHg at 20°C
Odor threshold:	Not determined	Vapor density:	0.7
pH-value:	Not determined	Relative density:	1.03
Melting/Freezing point:	Approx. 0°C	Solubilities:	Soluble in Water
Boiling point/Boiling range:	INNNY IIII	Partition coefficient (noctanol/water):	Not determined

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Chromate Indicator Reagent				
Flash point (closed cup):	INIAT ABTERMINEA	Auto/Self-ignition temperature:	Not determined	
Evaporation rate:	1 > 1	Decomposition temperature:	Not determined	
Flammability (solid, gaseous):	Not determined	Viscosity:	a. Kinematic: Not determined b. Dynamic: Not determined	
Density at 20°C:	Not determined			

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: No additional information. **Chronic Toxicity**: No additional information.

Skin corrosion/irritation: No additional information.

Serious eye damage/irritation: No additional information.

Respiratory or skin sensitization: No additional information.

Carcinogenicity:

OSHA: OSHA specifically regulated carcinogen (Potassium chromate)

Germ cell mutagenicity:

In vivo tests showed mutagenic effects

Reproductive Toxicity: No additional information.

STOT-single and repeated exposure:

May cause respiratory irritation

Additional toxicological information:

No additional information.

SECTION 12: Ecological information

Ecotoxicity:

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

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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: No additional information.

Mobility in soil: No additional information.

Other adverse effects: No additional information.

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

US DOT

UN Number:

ADR, ADN, DOT, IMDG, IATA Not Regulated.

Limited Quantity Exception:

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:

None

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):

None of the ingredients are listed.

SARA Section 313 (Specific toxic chemical listings):

7789-00-6 Potassium chromate.

RCRA (hazardous waste code):

None of the ingredients are listed.

TSCA (Toxic Substances Control Act):

according to 29CFR1910/1200 and GHS Rev. 3

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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 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. 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**: 1-0-0

GHS Full Text Phrases: None

Abbreviations and Acronyms:

IMDG International Maritime Code for Dangerous Goods.

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.

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.

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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).
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