

Safety Data Sheet

according to 29CFR1910/1200 and GHS Rev. 3

Effective date : 02.06.2015

Page 1 of 8

Potassium Dichromate, Reagent

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

Product name: Potassium Dichromate, Reagent

Manufacturer/Supplier Trade name:

Manufacturer/Supplier Article number: S25487A

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:

Fisher Science Education
6771 Silver Crest Road, Nazareth, PA 18064
(724)517-1954

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



Toxic

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

Acute toxicity (oral, dermal, inhalation), category 2

Acute toxicity (oral, dermal, inhalation), category 1

Oxid. Solid. 2.

Reprod. Tox. 1B.

STOT. RE. 1.

Aq AcTox. 1.

Aq ChrTox. 1.

Oral. AcTox. 3.

Inhal. AcTox. 2.

Derm. AcTox. 1.

Skin. Corr. 1B.

Eye. Damage. 1.

Resp. Sens. 1.

Germ. Muta. 1B.

Carcin. 1B.

Signal word: Danger

Hazard statements:

May intensify fire; oxidizer.

Toxic if swallowed.

Fatal in contact with skin.

Fatal if inhaled.

Safety Data Sheet

according to 29CFR1910/1200 and GHS Rev. 3

Effective date : 02.06.2015

Page 2 of 8

Potassium Dichromate, Reagent

Causes severe skin burns and eye damage.
May cause allergy or asthma symptoms or breathing difficulties if inhaled.
May cause genetic defects.
May cause cancer.
May damage fertility or the unborn child.
Causes damage to organs through prolonged or repeated exposure.
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.
Obtain special instructions before use.
Use only outdoors or in a well-ventilated area.
Avoid release to the environment.
Wear protective gloves/protective clothing/eye protection/face protection.
Wear respiratory protection.
Do not handle until all safety precautions have been read and understood.
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.
Do not breathe dust/fume/gas/mist/vapours/spray.
Do not get in eyes, on skin, or on clothing.
Wash skin thoroughly after handling.
Do not eat, drink or smoke when using this product.
In case of fire: Use agents recommended in section 5 for extinction.
Collect spillage.
IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do.
Continue rinsing.
Immediately call a POISON CENTER or doctor/physician.
Specific treatment is urgent (see ... on this label).
Remove/Take off immediately all contaminated clothing.
Wash contaminated clothing before reuse.
Store in a well ventilated place. Keep container tightly closed.
Store locked up.
Dispose of contents and container as instructed in Section 13.

Other Non-GHS Classification:

WHMIS
None
NFPA/HMIS

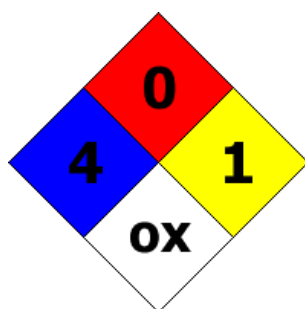
Safety Data Sheet

according to 29CFR1910/1200 and GHS Rev. 3

Effective date : 02.06.2015

Page 3 of 8

Potassium Dichromate, Reagent



NFPA SCALE (0-4)

Health	4
Flammability	0
Physical Hazard	1
Personal Protection	X

HMIS RATINGS (0-4)

SECTION 3: Composition/information on ingredients

Ingredients:

CAS 7778-50-9	Potassium dichromate	100 %
Percentages are by weight		

SECTION 4: First aid measures

Description of first aid measures

After inhalation:

Immediately seek medical attention. 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.

After skin contact:

Take victim immediately to hospital. Wash hands and exposed skin with soap and plenty of water.

After eye contact:

Protect unexposed eye. Flush exposed eye gently using water for 15-20 minutes. Remove contact lenses while rinsing. During transport to hospital continue rinsing.

After swallowing:

Immediately seek medical attention. Rinse mouth with water. Do not induce vomiting. Never give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and delayed:

Irritation. Shortness of breath. Headache. Nausea. Dizziness. 7778-50-9: Upper Respiratory Tract irritation. Cancer risk. 7778-50-9: Ulceration, Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin. 7778-50-9: Stomach - Irregularities - Based on Human Evidence.

Indication of any immediate medical attention and special treatment needed:

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

SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing agents:

Use water spray to cool unopened containers. Use water, dry chemical, chemical foam, carbon dioxide, or alcohol-resistant foam.

Unsuitable extinguishing agents: None

Special hazards arising from the substance or mixture:

7778-50-9: Included in the Candidate List of Substances of Very High Concern (SVHC) according to Regulation

Safety Data Sheet

according to 29CFR1910/1200 and GHS Rev. 3

Effective date : 02.06.2015

Page 4 of 8

Potassium Dichromate, Reagent

(EC) No. 1907/2006 (REACH). Heat, flame, and ignition sources should not be handled near chemical. Thermal decomposition can lead to release of irritating gases and vapors.

Advice for firefighters:

Protective equipment:

Wear respiratory protection. Refer to Section 8. Wear protective eyewear, gloves, and clothing. Refer to Section 8.

Additional information (precautions):

Avoid dust formation. 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. Contain spillage. Collect with an electrically protected vacuum cleaner or by wet-brushing. Place in container for disposal according to local regulations. Wear protective eyewear, 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: None

SECTION 7: Handling and storage

Precautions for safe handling:

Avoid dust formation. Heat, flame, and ignition sources should not be handled near chemical. 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:

7778-50-9 , Potassium dichromate, TWA 0.05 mg/m³ USA. ACGIH.
7778-50-9 , Potassium dichromate , PEL 0.005 mg/m³ OSHA.
7778-50-9, Total chromium, 25 µg/l Urine ACGIH - BEI (post-work week).
7778-50-9, Total chromium, 10 µg/l Urine ACGIH - BEI (Increase during shift).

Safety Data Sheet

according to 29CFR1910/1200 and GHS Rev. 3

Effective date : 02.06.2015

Page 5 of 8

Potassium Dichromate, Reagent

- 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:** Wear 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:** 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.
- General hygienic measures:** Perform routine housekeeping. Wash hands before breaks and immediately after handling the product. Avoid contact with skin, eyes, and clothing. Before reworking wash contaminated clothing.

SECTION 9: Physical and chemical properties

Appearance (physical state, color):	Orange Solid	Explosion limit lower: Explosion limit upper:	Not Determined. Not Determined.
Odor:	Not Determined.	Vapor pressure at 20°C:	Not Determined.
Odor threshold:	Not Determined.	Vapor density:	Not Determined.
pH-value:	3.5 - 5.0 at 29.4 g/l at 25 °C	Relative density:	2.680 g/cm ³
Melting/Freezing point:	398 °C	Solubilities:	Soluble in water: 29.4 g/l at 20 °C.
Boiling point/Boiling range:	500C	Partition coefficient (n-octanol/water):	log Pow: 5
Flash point (closed cup):	Not Determined.	Auto/Self-ignition temperature:	Not Determined.
Evaporation rate:	Not Determined.	Decomposition temperature:	Not Determined.
Flammability (solid, gaseous):	Not Determined.	Viscosity:	a. Kinematic: Not Determined. b. Dynamic: Not Determined.
Density at 20°C:	Not Determined. 7778-50-9: The substance or mixture is classified as oxidizing with the category 2		

SECTION 10: Stability and reactivity

Reactivity:

Reactive with metallic powders. Nonreactive under normal conditions.

Chemical stability:

Stable under normal conditions.

Safety Data Sheet

according to 29CFR1910/1200 and GHS Rev. 3

Effective date : 02.06.2015

Page 6 of 8

Potassium Dichromate, Reagent

Possible hazardous reactions:

None under normal processing.

Conditions to avoid:

Incompatible materials.

Incompatible materials:

Organic materials, Acids., Powdered metals, Hydrazine.

Hazardous decomposition products:

Potassium oxides, Chromium oxides.

SECTION 11: Toxicological information

Acute Toxicity:

Oral:

7778-50-9 LD50 oral - rat: 25 mg/kg

Dermal:

7778-50-9 LD50 Dermal - Rabbit - 14 mg/kg

Inhalation:

7778-50-9 LC50 Inhalation - Rat - female - 4 h - 0.088 mg/l

Chronic Toxicity: No additional information.

Corrosion Irritation: No additional information.

Sensitization: No additional information.

Numerical Measures: No additional information.

Carcinogenicity:

7778-50-9 : This is or contains a component that has been reported to be carcinogenic based on its IARC, OSHA, ACGIH, NTP, or EPA classification.

Mutagenicity:

7778-50-9: May alter genetic material. In vivo tests showed mutagenic effects.

Reproductive Toxicity: No additional information.

SECTION 12: Ecological information

Ecotoxicity:

7778-50-9: LC50 - Lepomis macrochirus - 0.131 mg/l - 96.0 h

7778-50-9: mortality NOEC - Pimephales promelas (fathead minnow) - 6 mg/l - 7.0 d

7778-50-9: mortality NOEC - Daphnia (water flea) - 0.016 - 0.064 mg/l - 7 d

7778-50-9: EC50 - Daphnia magna (Water flea) - 0.035 mg/l - 48 h

7778-50-9: EC50 - Pseudokirchneriella subcapitata - 0.31 mg/l - 72 h

Persistence and degradability: No additional information.

Bioaccumulative potential:

7778-50-9: Oncorhynchus mykiss (rainbow trout) - 180 d - 200 µg/l. 7778-50-9: Bioconcentration factor (BCF): 17.4.

Mobility in soil: No additional information.

Other adverse effects: No additional information.

Safety Data Sheet

according to 29CFR1910/1200 and GHS Rev. 3

Effective date : 02.06.2015

Page 7 of 8

Potassium Dichromate, Reagent

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. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. 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

3086

Limited Quantity Exception:

None

Bulk:

RQ (if applicable): None

Proper shipping Name: Toxic solids, oxidizing, n.o.s. (Potassium dichromate).

Hazard Class: 6, 5

Packing Group: II.

Marine Pollutant (if applicable): No additional information.

Comments: None

Non Bulk:

RQ (if applicable): None

Proper shipping Name: Toxic solids, oxidizing, n.o.s. (Potassium dichromate).

Hazard Class: 6, 5

Packing Group: II.

Marine Pollutant (if applicable): No additional information.

Comments: None



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 are listed.

RCRA (hazardous waste code):

None of the ingredients are listed.

TSCA (Toxic Substances Control Act):

All ingredients are listed.

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

Safety Data Sheet

according to 29CFR1910/1200 and GHS Rev. 3

Effective date : 02.06.2015

Page 8 of 8

Potassium Dichromate, Reagent

7778-50-9 Potassium Dichromate 10 lbs.

Proposition 65 (California):

Chemicals known to cause cancer:

None of the ingredients are listed.

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:

None of the ingredients are listed.

Canada

Canadian Domestic Substances List (DSL):

All ingredients are listed.

Canadian NPRI Ingredient Disclosure list (limit 0.1%):

7778-50-9 Potassium dichromate.

Canadian NPRI Ingredient Disclosure list (limit 1%):

None of the 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.

GHS Full Text Phrases: None

Abbreviations and Acronyms: None

Effective date: 02.06.2015

Last updated: 06.19.2015