

Safety Data Sheet

according to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Revision: June 15, 2020

1 Identification

- **Product identifier**
- **Trade name: Potassium Chromate, 1M**
- **Product code:** PC8051SS
- **Recommended use and restriction on use**
- **Recommended use:** Laboratory chemicals
- **Restrictions on use:** No relevant information available.
- **Details of the supplier of the Safety Data Sheet**
- **Manufacturer/Supplier:**
AquaPhoenix Scientific, Inc.
860 Gitts Run Road
Hanover, PA 17331 USA
Tel +1 (717)632-1291
Toll-Free: (866)632-1291
info@aquaphoenixsci.com
- **Distributor:**
AquaPhoenix Scientific
860 Gitts Run Road,
Hanover, PA 17331
(717) 632-1291
- **Emergency telephone number:**
ChemTel Inc.
(800)255-3924 (North America)
+1 (813)248-0585 (International)

2 Hazard(s) identification

- **Classification of the substance or mixture**
- Acute Tox. 4 H302 Harmful if swallowed.
- Skin Irrit. 2 H315 Causes skin irritation.
- Eye Irrit. 2A H319 Causes serious eye irritation.
- Skin Sens. 1 H317 May cause an allergic skin reaction.
- Muta. 1B H340 May cause genetic defects.
- Carc. 1B H350 May cause cancer. Route of exposure: Inhalation.

- **Label elements**

- **GHS label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

- **Hazard pictograms:**



GHS07 GHS08

- **Signal word:** Danger
- **Hazard statements:**
H302 Harmful if swallowed.
H315 Causes skin irritation.
H319 Causes serious eye irritation.

(Cont'd. on page 2)

Safety Data Sheet

according to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Revision: June 15, 2020

Trade name: Potassium Chromate, 1M

(Cont'd. of page 1)

H317 May cause an allergic skin reaction.
 H340 May cause genetic defects.
 H350 May cause cancer. Route of exposure: Inhalation.

· **Precautionary statements:**




P201 Obtain special instructions before use.
 P202 Do not handle until all safety precautions have been read and understood.
 P261 Avoid breathing mist.
 P264 Wash thoroughly after handling.
 P270 Do not eat, drink or smoke when using this product.
 P272 Contaminated work clothing must not be allowed out of the workplace.
 P280 Wear protective gloves/protective clothing/eye protection/face protection.
 P301+P312 If swallowed: Call a poison center/doctor if you feel unwell.
 P330 Rinse mouth.
 P302+P352 If on skin: Wash with plenty of soap and water.
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P308+P313 IF exposed or concerned: Get medical advice/attention.
 P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
 P337+P313 If eye irritation persists: Get medical advice/attention.
 P362+P364 Take off contaminated clothing and wash it before reuse.
 P405 Store locked up.
 P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Other hazards** There are no other hazards not otherwise classified that have been identified.

3 Composition/information on ingredients

· **Chemical characterization: Mixtures**

· **Components:**

7789-00-6	Potassium chromate  Acute Tox. 3, H301  Muta. 1B, H340; Carc. 1B, H350  Skin Irrit. 2, H315; Eye Irrit. 2A, H319; Skin Sens. 1, H317; STOT SE 3, H335	19.5%
7732-18-5	Water	80.5%

· **Additional information:** For the wording of the listed Hazard Statements, refer to section 16.

4 First-aid measures

· **Description of first aid measures**

· **After inhalation:**

Supply fresh air.
 Seek immediate medical advice.
 If experiencing respiratory symptoms: Call a poison center/doctor.

· **After skin contact:**

Immediately wash with water and soap and rinse thoroughly.
 If skin irritation or rash occurs: Get medical advice/attention.

· **After eye contact:**

(Cont'd. on page 3)

Safety Data Sheet

according to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Revision: June 15, 2020

Trade name: Potassium Chromate, 1M

(Cont'd. of page 2)

Remove contact lenses if worn.

Flush with water for 15 minutes occasionally lifting the eyelids. Seek medical attention.

· **After swallowing:**

Rinse out mouth and then drink plenty of water.

Do not induce vomiting; immediately call for medical help.

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

Allergic reactions

Irritating to eyes and skin.

Gastric or intestinal disorders when ingested.

· **Danger:**

May cause sensitization by skin contact.

Danger of impaired breathing.

Harmful if swallowed.

May cause cancer. Route of exposure: Inhalation.

May cause genetic defects.

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

Medical supervision for at least 48 hours.

Treat skin and mucous membrane with antihistamine and corticoid preparations.

Contains Potassium chromate. May produce an allergic reaction.

If medical advice is needed, have product container or label at hand.

5 Fire-fighting measures

· **Extinguishing media**

· **Suitable extinguishing agents:** Use fire fighting measures that suit the environment.

· **For safety reasons unsuitable extinguishing agents:** No relevant information available.

· **Special hazards arising from the substance or mixture**

Formation of toxic gases is possible during heating or in case of fire.

Substance/product is oxidizing when dry.

· **Advice for firefighters**

· **Protective equipment:**

Wear self-contained respiratory protective device.

Wear fully protective suit.

6 Accidental release measures

· **Personal precautions, protective equipment and emergency procedures**

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation.

For large spills, use respiratory protective device against the effects of fumes/dust/aerosol.

· **Environmental precautions**

Do not allow to enter sewers/ surface or ground water.

Inform respective authorities in case of seepage into water course or sewage system.

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

Absorb with non-combustible liquid-binding material (sand, diatomite, acid binders, universal binders).

Substance/product is oxidizing when dry.

Send for recovery or disposal in suitable receptacles.

· **Reference to other sections**

(Cont'd. on page 4)

Safety Data Sheet

according to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Revision: June 15, 2020

Trade name: Potassium Chromate, 1M

(Cont'd. of page 3)

See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and storage

- **Handling**
- **Precautions for safe handling:**
 - Prevent formation of aerosols.
 - Use only in well ventilated areas.
 - Avoid splashes or spray in enclosed areas.
- **Information about protection against explosions and fires:** Substance/product is oxidizing when dry.
- **Conditions for safe storage, including any incompatibilities**
- **Requirements to be met by storerooms and receptacles:** Avoid storage near extreme heat.
- **Information about storage in one common storage facility:**
 - Store away from foodstuffs.
 - Store away from flammable substances.
 - Store away from reducing agents.
- **Further information about storage conditions:** Keep containers tightly sealed.
- **Specific end use(s)** No relevant information available.

8 Exposure controls/personal protection

- **Control parameters**
- **Components with limit values that require monitoring at the workplace:**

The following constituent is the only constituent of the product which has a PEL, TLV or other recommended exposure limit.

7789-00-6 Potassium chromate

PEL (USA)	Long-term value: 0.005* mg/m ³ Ceiling limit value: 0.1** mg/m ³ *as Cr(VI) **as CrO ₃ ; see 29 CFR 1910.1026
REL (USA)	Long-term value: 0.0002 mg/m ³ as Cr; See Pocket Guide Apps. A and C
TLV (USA)	Short-term value: 0.0005 mg/m ³ Long-term value: 0.0002 mg/m ³ as Cr(VI); inhalable, Skin; BEI, DSEN, RSEN
EL (Canada)	Long-term value: 0.025 mg/m ³ Ceiling limit value: 0.1 mg/m ³ as Cr; ACGIH A1, IARC 1; Skin; S(D), S(R)
LMPE (Mexico)	Long-term value: 0.05 mg/m ³ A1, IBE; como Cr

- **Ingredients with biological limit values:**

7789-00-6 Potassium chromate

BEI (USA)	25 µg/L Medium: urine Time: end of shift at end of workweek
-----------	---

(Cont'd. on page 5)

Safety Data Sheet

according to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Revision: June 15, 2020

Trade name: Potassium Chromate, 1M

(Cont'd. of page 4)

Parameter: Total chromium (fume)

10 µg/L

Medium: urine

Time: increase during shift

Parameter: Total chromium (fume)

- **Exposure controls**

- **General protective and hygienic measures:**

The usual precautionary measures for handling chemicals should be followed.

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Store protective clothing separately.

Do not inhale gases / fumes / aerosols.

Avoid contact with the eyes and skin.

- **Engineering controls:** Provide adequate ventilation.

- **Breathing equipment:**

Not required under normal conditions of use.

Use suitable respiratory protective device when high concentrations are present.

- **Protection of hands:**



Protective gloves

- **Material of gloves**

A recommendation for a suitable glove material is not available. Testing will be required to determine the suitability of any potential glove materials.

- **Eye protection:**



Safety glasses

Follow relevant national guidelines concerning the use of protective eyewear.

- **Body protection:** Protective work clothing

- **Limitation and supervision of exposure into the environment**

No relevant information available.

- **Risk management measures** No relevant information available.

9 Physical and chemical properties

- **Information on basic physical and chemical properties**

- **Appearance:**

Form: Liquid

Color: Yellow

- **Odor:** Characteristic

- **Odor threshold:** Not determined.

- **pH-value:** Not determined.

(Cont'd. on page 6)

Safety Data Sheet

according to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Revision: June 15, 2020

Trade name: Potassium Chromate, 1M

(Cont'd. of page 5)

· Melting point/Melting range:	Not determined.
· Boiling point/Boiling range:	102-105 °C (215.6-157 °F)
· Flash point:	Not applicable.
· Flammability (solid, gaseous):	Not applicable.
· Auto-ignition temperature:	Not determined.
· Decomposition temperature:	Not determined.
· Danger of explosion:	Product does not present an explosion hazard.
· Explosion limits	
Lower:	Not determined.
Upper:	Not determined.
· Oxidizing properties:	Contains oxidizing agent.
· Vapor pressure at 20 °C (68 °F):	23 hPa (17.3 mm Hg)
· Density at 20 °C (68 °F):	1.18-1.22 g/cm ³ (9.85-10.18 lbs/gal)
· Relative density:	Not determined.
· Vapor density:	Not determined.
· Evaporation rate:	Not determined.
· Solubility in / Miscibility with Water:	Fully miscible.
· Partition coefficient (n-octanol/water):	Not determined.
· Viscosity	
Dynamic:	Not determined.
Kinematic:	Not determined.
· Other information	No relevant information available.

10 Stability and reactivity

- **Reactivity:** No relevant information available.
- **Chemical stability:** Stable under normal temperatures and pressures.
- **Thermal decomposition / conditions to be avoided:**
No decomposition if used and stored according to specifications.
Do not allow to dry out.
- **Possibility of hazardous reactions**
Reacts with reducing agents.
Substance/product is oxidizing when dry.
Toxic fumes may be released if heated above the decomposition point.
- **Conditions to avoid** No relevant information available.
- **Incompatible materials**
Flammable materials.
Reducing agents.
- **Hazardous decomposition products**
Under fire conditions only:
Toxic metal oxide smoke

(Cont'd. on page 7)

Safety Data Sheet

according to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Revision: June 15, 2020

Trade name: Potassium Chromate, 1M

(Cont'd. of page 6)

11 Toxicological information

· Information on toxicological effects

· **Acute toxicity:** Harmful if swallowed.

· LD/LC50 values that are relevant for classification:

ATE (Acute Toxicity Estimate)

Oral	LD50	692-897 mg/kg (rat)
------	------	---------------------

7789-00-6 Potassium chromate

Oral	LD50	180 mg/kg (mouse)
		135-175 mg/kg (rat) (Acute Toxicity Estimate)

· Primary irritant effect:

- **On the skin:** Irritant to skin and mucous membranes.
- **On the eye:** Causes eye irritation.
- **Sensitization:** Sensitization possible through skin contact.

· IARC (International Agency for Research on Cancer):

None of the ingredients are listed.

· NTP (National Toxicology Program):

7789-00-6	Potassium chromate	K
-----------	--------------------	---

· OSHA-Ca (Occupational Safety & Health Administration):

None of the ingredients are listed.

· Probable route(s) of exposure:

Ingestion.
Inhalation.
Eye contact.
Skin contact.

· Acute effects (acute toxicity, irritation and corrosivity):

Irritating to eyes and skin.
Harmful if swallowed.

· Repeated dose toxicity:

Sensitizing effect by skin contact is possible with prolonged exposure.
Danger of very serious irreversible effects.

· **Germ cell mutagenicity:** May cause genetic defects.

· **Carcinogenicity:** May cause cancer. Route of exposure: Inhalation.

· **Reproductive toxicity:** Based on available data, the classification criteria are not met.

· **STOT-single exposure:** Based on available data, the classification criteria are not met.

· **STOT-repeated exposure:** Based on available data, the classification criteria are not met.

· **Aspiration hazard:** Based on available data, the classification criteria are not met.

12 Ecological information

· Toxicity

- **Aquatic toxicity** No relevant information available.
- **Persistence and degradability** No relevant information available.
- **Bioaccumulative potential:** No relevant information available.
- **Mobility in soil:** No relevant information available.

(Cont'd. on page 8)

Safety Data Sheet

according to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Revision: June 15, 2020

Trade name: Potassium Chromate, 1M



(Cont'd. of page 7)

- **Ecotoxicological effects:**
- **Remark:** Toxic for fish
- **Additional ecological information**
- **General notes:**
The product contains heavy metals. Avoid transfer into the environment. Specific preliminary treatments are necessary.
Due to available data on eliminability/decomposition and bioaccumulation potential prolonged term damage of the environment can not be excluded.
- **Other adverse effects** No relevant information available.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**
The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes.
- **Uncleaned packagings**
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

- | | |
|---------------------------------------|---|
| · UN-Number | |
| · DOT, ADR/RID/ADN, IMDG, IATA | UN3082 |
| · UN proper shipping name | |
| · DOT | Environmentally hazardous substance, liquid, n.o.s. (potassium chromate) |
| · ADR/RID/ADN, IATA | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (POTASSIUM CHROMATE) |
| · IMDG | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (POTASSIUM CHROMATE), MARINE POLLUTANT |
| · Transport hazard class(es) | |
| · DOT, IMDG, IATA | |
| |   |
| · Class | 9 |
| · Label | 9 |

(Cont'd. on page 9)

Safety Data Sheet

according to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Revision: June 15, 2020

Trade name: Potassium Chromate, 1M

(Cont'd. of page 8)

· **ADR/RID/ADN**



· **Class** 9 (M6)
 · **Label** 9

· **Packing group**
 · **DOT, ADR/RID/ADN, IMDG, IATA** III

· **Environmental hazards** Product contains environmentally hazardous substances: Potassium chromate
 · **Marine pollutant:** Yes (DOT)
 Symbol (fish and tree)

· **Special precautions for user** Warning: Miscellaneous dangerous substances and articles
 · **Hazard identification number (Kemler code):** 90
 · **EMS Number:** F-A,S-F

· **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** Not applicable.

· **Transport/Additional information:** Not regulated when carried in single or combination packaging containing a net quantity of 5 L or less for liquids or 5 kg or less for solids per the following:
 ADR: SP 375
 IMDG: 2.10.2.7
 IATA: special provision A197
 · **DOT** Labeling as a Marine Pollutant is only required for bulk single package shipments. Bulk packaging consists of a maximum capacity of greater than 450 L (119 gallons) for a liquid and a maximum net mass greater than 400 kg (882 pounds) for a solid. (See 171.4(c))

15 Regulatory information

· **Safety, health and environmental regulations/legislation specific for the substance or mixture**
 · **United States (USA)**
 · **SARA**

· **Section 302 (extremely hazardous substances):**

None of the ingredients are listed.

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

7789-00-6 | Potassium chromate

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

All ingredients are listed or exempt.

(Cont'd. on page 10)

Safety Data Sheet

according to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Revision: June 15, 2020

Trade name: Potassium Chromate, 1M

(Cont'd. of page 9)

· **Proposition 65 (California)**

· **Chemicals known to cause cancer:**

7789-00-6	Potassium chromate
-----------	--------------------

· **Chemicals known to cause developmental toxicity for females:**

7789-00-6	Potassium chromate
-----------	--------------------

· **Chemicals known to cause developmental toxicity for males:**

7789-00-6	Potassium chromate
-----------	--------------------

· **Chemicals known to cause developmental toxicity:**

7789-00-6	Potassium chromate
-----------	--------------------

· **EPA (Environmental Protection Agency):**

7789-00-6	Potassium chromate	A(inh), D(oral), K/L(inh), CBD(oral)
-----------	--------------------	--------------------------------------

· **IARC (International Agency for Research on Cancer):**

7789-00-6	Potassium chromate	1
-----------	--------------------	---

· **Canadian Domestic Substances List (DSL):**

All ingredients listed on DSL or NDSL.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Abbreviations and acronyms:**

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

OSHA: Occupational Safety & Health Administration

Acute Tox. 3: Acute toxicity – Category 3

Acute Tox. 4: Acute toxicity – Category 4

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A

Skin Sens. 1: Skin sensitisation – Category 1

Muta. 1B: Germ cell mutagenicity – Category 1B

Carc. 1B: Carcinogenicity – Category 1B

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

· **Sources**

Website, European Chemicals Agency (echa.europa.eu)

Website, US EPA Substance Registry Services (ofmpub.epa.gov/sor internet/registry/substreg/home/overview/home.do)

Website, Chemical Abstracts Registry, American Chemical Society (www.cas.org)

Patty's Industrial Hygiene, 6th ed., Rose, Vernon, ed. ISBN: 978-0-470-07488-6

Casarett and Doull's Toxicology: The Basic Science of Poisons, 8th Ed., Klaasen, Curtis D., ed., ISBN: 978-0-07-176923-5.

Safety Data Sheets, Individual Manufacturers

SDS Prepared by:

ChemTel

(Cont'd. on page 11)

Safety Data Sheet

according to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Revision: June 15, 2020

Trade name: Potassium Chromate, 1M

(Cont'd. of page 10)

1305 North Florida Avenue
Tampa, Florida USA 33602-2902
Toll Free North America 1-888-255-3924 Intl. +01 813-248-0573
Website: www.chemtel.com