

# Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 01.16.2018

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**Potassium Dichromate,ACS**

## SECTION 1: Identification

### Product identifier

**Product name:** Potassium Dichromate,ACS

**Product code:** PD5000

### Recommended use of the product and restriction on use

**Relevant identified uses:** Not determined or not applicable.

**Uses advised against:** Not determined or not applicable.

**Reasons why uses advised against:** Not determined or not applicable.

### Manufacturer or supplier details

#### Manufacturer:

AquaPhoenix Scientific  
860 Gitts Run Road  
Hanover  
PA 17331  
(717) 632-1291

### Emergency telephone number:

**United States**

Emergency Telephone (800) 255-3924

## SECTION 2: Hazard(s) identification

### GHS classification:

Oxidizing solids, category 2  
Acute toxicity (oral), category 3  
Acute toxicity (dermal), category 4  
Acute toxicity (inhalation), category 2  
Skin corrosion, category 1B  
Skin sensitization, category 1  
Germ cell mutagenicity, category 1B  
Respiratory sensitization, category 1  
Carcinogenicity, category 1B  
Specific target organ toxicity - repeated exposure, category 1  
Reproductive toxicity, category 1B  
Chronic aquatic hazard, category 1  
Acute aquatic hazard, category 1

### Label elements

#### Hazard pictograms:



**Signal word:** Danger

### Hazard statements:

H272 May intensify fire; oxidizer

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H301 Toxic if swallowed  
H312 Harmful in contact with skin  
H330 Fatal if inhaled  
H314 Causes severe skin burns and eye damage  
H317 May cause an allergic skin reaction  
H340 May cause genetic defects  
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled  
H350 May cause cancer  
H372 Causes damage to organs through prolonged or repeated exposure  
H360 May damage fertility or the unborn child  
H410 Very toxic to aquatic life with long lasting effects  
H400 Very toxic to aquatic life

#### Precautionary statements:

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking  
P220 Keep/Store away from clothing/combustible materials  
P221 Take any precaution to avoid mixing with combustibles  
P280 Wear protective gloves/protective clothing/eye protection/face protection  
P264 Wash skin thoroughly after handling  
P270 Do not eat, drink or smoke when using this product  
P260 Do not breathe dust/fume/gas/mist/vapors/spray  
P271 Use only outdoors or in a well-ventilated area  
P284 Wear respiratory protection  
P272 Contaminated work clothing should not be allowed out of the workplace  
P201 Obtain special instructions before use  
P202 Do not handle until all safety precautions have been read and understood  
P285 In case of inadequate ventilation wear respiratory protection  
P273 Avoid release to the environment  
P370+P378 In case of fire: Use agents recommended in section 5 for extinction  
P363 Wash contaminated clothing before reuse  
P302+P352+P312 If on skin: Wash with soap and water. Call a poison center or doctor/physician if you feel unwell  
P320 Specific treatment is urgent (see ... on this label)  
P304+P340+P310 If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a poison center or doctor/physician  
P301+P330+P331+P310 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/physician.  
P303+P361+P353+P310 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a POISON CENTER or doctor/physician.  
P305+P351+P338+P310 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.  
P333+P313 If skin irritation or a rash occurs: Get medical advice/attention  
P308+P313 If exposed or concerned: Get medical advice/attention  
P391 Collect spillage  
P405 Store locked up  
P403+P233 Store in a well ventilated place. Keep container tightly closed  
P501 Dispose of contents and container as instructed in Section 13

**Hazards not otherwise classified:** None

### SECTION 3: Composition/information on ingredients

Identification	Name	Weight %
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CAS number: 7778-50-9	Potassium Dichromate	100
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**Additional Information:** None

### SECTION 4: First aid measures

#### Description of first aid measures

##### General notes:

Not determined or not applicable.

##### After inhalation:

Loosen clothing as necessary and position individual in a comfortable position  
Maintain an unobstructed airway  
Get medical advice/attention if you feel unwell  
Move exposed individual to fresh air  
Immediately call a POISON CONTROL CENTER or seek medical attention

##### After skin contact:

Rinse affected area with soap and water  
If symptoms develop or persist, seek medical attention  
Wash affected area with soap and water  
Seek medical attention if symptoms develop or persist  
Immediately remove all contaminated clothing  
Immediately call a POISON CONTROL CENTER or seek medical attention

##### After eye contact:

Rinse/flush exposed eye(s) gently using water for 15-20 minutes  
If symptoms develop or persist, seek medical attention  
Remove contact lens(es) if able to do so during rinsing  
Immediately call a POISON CONTROL CENTER or seek medical attention

##### After swallowing:

Rinse mouth thoroughly  
Seek medical attention if irritation, discomfort, or vomiting persists  
Immediately call a POISON CONTROL CENTER or seek medical attention  
Do not induce vomiting  
Rinse mouth and then drink plenty of water

#### Most important symptoms and effects, both acute and delayed

##### Acute symptoms and effects:

Not determined or not applicable.

##### Delayed symptoms and effects:

Not determined or not applicable.

#### Immediate medical attention and special treatment

##### Specific treatment:

Not determined or not applicable.

##### Notes for the doctor:

Not determined or not applicable.

### SECTION 5: Firefighting measures

#### Extinguishing media

##### Suitable extinguishing media:

Use appropriate fire suppression agents for adjacent combustible materials or sources of ignition

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**Unsuitable extinguishing media:**

Not determined or not applicable.

**Specific hazards during fire-fighting:**

Thermal decomposition can lead to release of irritating gases and vapors

Will release oxygen when heated, intensifying a fire

**Special protective equipment for firefighters:**

Use typical firefighting equipment, self-contained breathing apparatus, special tightly sealed suit

**Special precautions:**

Carbon monoxide and carbon dioxide may form upon combustion

Heating causes a rise in pressure, risk of bursting and combustion

### SECTION 6: Accidental release measures

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

Ensure adequate ventilation

Ensure air handling systems are operational

Wear protective eye wear, gloves and clothing

**Environmental precautions:**

Should not be released into the environment

Prevent from reaching drains, sewer or waterway

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

Wear protective eye wear, gloves and clothing

Sweep or scoop up solid material while minimizing dust generation

Dispose of contents / container in accordance with local regulations

**Reference to other sections:**

Not determined or not applicable.

### SECTION 7: Handling and storage

**Precautions for safe handling:**

Use only with adequate ventilation.

Avoid breathing dust.

Do not eat, drink, smoke or use personal products when handling chemical substances.

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

Keep container tightly sealed.

Keep container dry.

Store in a cool, well-ventilated area.

Store away from flammable and combustible materials (paper, wood).

Store away from reducing agents (zinc, alkaline metals, formic acid).

### SECTION 8: Exposure controls/personal protection

Only those substances with limit values have been included below.

**Occupational Exposure limit values:**

Country (Legal Basis)	Substance	Identifier	Permissible concentration
ACGIH	Potassium Dichromate	7778-50-9	ACGIH TLV 0.05 mg/m <sup>3</sup> , as Cr
United States (OSHA)	Potassium Dichromate	7778-50-9	OSHA PEL 0.005 mg/m <sup>3</sup> , as Cr(VI)
NIOSH	Potassium Dichromate	7778-50-9	NIOSH IDLH 250 mg/m <sup>3</sup> as Chromium(II) compounds

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Country (Legal Basis)	Substance	Identifier	Permissible concentration
	Potassium Dichromate	7778-50-9	NIOSH IDLH 25 mg/m <sup>3</sup> as Chromium(III) compounds

#### Biological limit values:

No biological exposure limits noted for the ingredient(s).

#### Information on monitoring procedures:

Monitoring of the concentration of substances in the breathing zone of workers or in the general workplace may be required to confirm compliance with an OEL and adequacy of exposure controls.

Biological monitoring may also be appropriate for some substances.

#### 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.

#### Personal protection equipment

##### Eye and face protection:

Safety goggles or glasses, or appropriate eye protection.

##### Skin and body protection:

Select glove material impermeable and resistant to the substance.

Wear appropriate clothing to prevent any possibility of skin contact.

##### Respiratory protection:

If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn.

#### General hygienic measures:

Avoid contact with skin, eyes and clothing.

Wash hands before breaks and at the end of work.

Wash contaminated clothing before reuse.

### SECTION 9: Physical and chemical properties

#### Information on basic physical and chemical properties

Appearance	Orange solid
Odor	Not determined
Odor threshold	Not determined
pH	3.5 - 5.0 at 29.4 g/l at 25 °C
Melting point/freezing point	398° C
Initial boiling point/range	500° C
Flash point (closed cup)	Not determined
Evaporation rate	Not determined
Flammability (solid, gas)	Not determined
Upper flammability/explosive limit	Not determined
Lower flammability/explosive limit	Not determined
Vapor pressure	Not determined
Vapor density	Not determined
Density	Not determined

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Relative density	2.680 g/cm <sup>3</sup>
Solubilities	Soluble in water, 29.4 g/l at 20 °C
Partition coefficient (n-octanol/water)	log pow: 5
Auto/Self-ignition temperature	Not determined
Decomposition temperature	Not determined
Dynamic viscosity	Not determined
Kinematic viscosity	Not determined
Explosive properties	Not determined
Oxidizing properties	The substance or mixture is classified as oxidizer category 2

### Other information

### SECTION 10: Stability and reactivity

#### Reactivity:

Reactive with metallic powders.

#### Chemical stability:

Stable under normal conditions of use and storage.

#### Possibility of hazardous reactions:

None under normal conditions of use and storage.

#### Conditions to avoid:

None known.

#### Incompatible materials:

Organic materials. Acids. Powdered metals. Hydrazine.

#### Hazardous decomposition products:

Potassium oxides. Chromium oxides.

### SECTION 11: Toxicological information

#### Acute toxicity

**Assessment:** Toxic if swallowed Harmful in contact with skin Fatal if inhaled

**Product data:** No data available.

#### Substance data:

Name	Route	Result
Potassium Dichromate	oral	LD50 - Mouse - 190 mg/kg
	inhalation	LC50 - Rat - 94.0 mg/m <sup>3</sup>
	dermal	LD50 - Rabbit - 1,150 mg/kg

#### Skin corrosion/irritation

**Assessment:** Causes severe skin burns and eye damage

**Product data:** No data available.

#### Substance data:

Name	Result
Potassium Dichromate	Causes severe skin burns and eye damage.

#### Serious eye damage/irritation

**Assessment:** Based on available data, the classification criteria are not met.

**Product data:** No data available.

**Substance data:** No data available.

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### Potassium Dichromate,ACS

#### Respiratory or skin sensitization

**Assessment:** May cause an allergic skin reaction May cause allergy or asthma symptoms or breathing difficulties if inhaled

**Product data:** No data available.

**Substance data:**

Name	Result
Potassium Dichromate	May cause an allergic skin reaction.
	May cause allergy or asthma symptoms or breathing difficulties if inhaled.

#### Carcinogenicity

**Assessment:** May cause cancer

**Product data:** No data available.

**Substance data:**

Name	Species	Result
Potassium Dichromate	Potassium Dichromate	Suspected of causing cancer through inhalation.

**International Agency for Research on Cancer (IARC):** None of the ingredients are listed.

**National Toxicology Program (NTP):**

Name	Classification
Potassium Dichromate	Known to be human carcinogens

#### Germ cell mutagenicity

**Assessment:** May cause genetic defects

**Product data:** No data available.

**Substance data:**

Name	Result
Potassium Dichromate	Suspected of causing genetic defects.

#### Reproductive toxicity

**Assessment:** May damage fertility or the unborn child

**Product data:** No data available.

**Substance data:**

Name	Result
Potassium Dichromate	May damage fertility or the unborn child.

#### Specific target organ toxicity (single exposure)

**Assessment:** Based on available data, the classification criteria are not met.

**Product data:** No data available.

**Substance data:**

Name	Result
Potassium Dichromate	Specific Target Organ Toxicity, Repeated Exposure - Causes damage to cardiovascular/hematological organs through prolonged or repeated exposure.

#### Specific target organ toxicity (repeated exposure)

**Assessment:** Causes damage to organs through prolonged or repeated exposure

**Product data:** No data available.

**Substance data:** No data available.

#### Aspiration toxicity

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**Assessment:** Based on available data, the classification criteria are not met.

**Product data:** No data available.

**Substance data:** No data available.

**Information on likely routes of exposure:** No data available.

**Symptoms related to the physical, chemical and toxicological characteristics:** No data available.

**Other information:** No data available.

### SECTION 12: Ecological information

#### Acute (short-term) toxicity

**Assessment:** Very toxic to aquatic life

**Product data:** No data available.

**Substance data:**

Name	Result
Potassium Dichromate	EC50 - Navicula seminulum (Diatom) - 0.272 mg/L - 96 h
	EC50 - Moina australiensis - 0.0247 mg/L - 48 h
	NOEC - Daphnia carinata (Water Flea) - 0.050 mg/L - 14 d
	LC50 - Lepomis macrochirus (Bluegill) - 0.113 mg/L - 96 h

#### Chronic (long-term) toxicity

**Product data:** No data available.

**Substance data:** No data available.

#### Persistence and degradability

**Product data:** No data available.

**Substance data:** No data available.

#### Bioaccumulative potential

**Product data:** No data available.

**Substance data:** No data available.

#### Mobility in soil

**Product data:** No data available.

**Substance data:** No data available.

**Other adverse effects:** No data available.



### SECTION 13: Disposal considerations

#### Disposal methods:

It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities

### SECTION 14: Transport information

#### United States Transportation of dangerous goods (49 CFR DOT)

UN number	3086
UN proper shipping name	TOXIC SOLID, OXIDIZING, N.O.S. (Potassium dichromate)
UN transport hazard class(es)	6 (5.1) <div></div>
Packing group	II
Environmental hazards	None
Special precautions for user	None



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## Potassium Dichromate,ACS

Reportable quantity	10 Lbs
Excepted quantities	1 G
Passenger air/rail	1 KG
Cargo aircraft only	5 KG
Stowage category	C

### International Maritime Dangerous Goods (IMDG)

UN number	3086
UN proper shipping name	TOXIC SOLID, OXIDIZING, N.O.S. (Potassium dichromate)
UN transport hazard class(es)	6 (5.1)  
Packing group	II
Environmental hazards	None
Special precautions for user	None
Excepted quantities	1 G
Limited quantity	500 G

### International Air Transport Association Dangerous Goods Regulations (IATA-DGR)

UN number	3086
UN proper shipping name	TOXIC SOLID, OXIDIZING, N.O.S. (Potassium dichromate)
UN transport hazard class(es)	6 (5.1)  
Packing group	II
Environmental hazards	None
Special precautions for user	None
Excepted quantities	1 G
Passenger and cargo	1 KG
Cargo aircraft only	15 KG
Limited quantity	500 G

## SECTION 15: Regulatory information

### United States regulations

#### Inventory listing (TSCA):

7778-50-9	Potassium Dichromate	Listed
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Significant New Use Rule (TSCA Section 5): Not determined.

#### Export notification under TSCA Section 12(b):

7778-50-9	Potassium Dichromate	Listed
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#### SARA Section 311/312 hazards:

Acute	Chronic	Fire	Pressure	Reactive
No	No	No	No	No

SARA Section 302 extremely hazardous substances: Not determined.

SARA Section 313 toxic chemicals:

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7778-50-9	Potassium Dichromate	Listed
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#### CERCLA:

7778-50-9	Potassium Dichromate	Listed	10
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RCRA: Not determined.

Section 112(r) of the Clean Air Act (CAA): Not determined.

#### Massachusetts Right to Know:

7778-50-9	Potassium Dichromate	Listed
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#### New Jersey Right to Know:

7778-50-9	Potassium Dichromate	Listed
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#### New York Right to Know:

7778-50-9	Potassium Dichromate	Listed
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Pennsylvania Right to Know: Not determined.

#### California Proposition 65:

WARNING: This product contains a chemical known to the State of California to cause cancer.

7778-50-9	Potassium Dichromate
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WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

7778-50-9	Potassium Dichromate
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### SECTION 16: Other information

Abbreviations and Acronyms: None

#### Disclaimer:

This product has been classified in accordance with OSHA HCS 2012 guidelines. The information provided in this SDS is correct, to the best of our knowledge, based on information available. The information given is designed only as a guidance for safe handling, use, storage, transportation and disposal and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials, unless specified in the text. The responsibility to provide a safe workplace remains with the user.

NFPA: 4-0-1-ox

HMIS: 0-4-1

Initial preparation date: 01.16.2018

End of Safety Data Sheet