

## SAFETY DATA SHEET

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1 Product identifiers

Product name	Potassium Dichromate 0.5N Solution
CAS number	7778-50-9
Synonyms	N/A

#### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses	Laboratory chemicals.
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#### 1.3 Details of the supplier of the safety data sheet

Company	Lab Alley, LLC 12501 Pauls Valley Road Austin, Texas 78737 U.S.A.
Telephone	512-668-9918
Fax	512-886-4008

#### 1.4 Emergency telephone

Emergency Phone #	US & Canada: 1-800-535-5053	INFOTRAC
	International 1-352-323-3500	INFOTRAC

### SECTION 2: Hazards identification


#### 2.1 Classification of the substance or mixture

##### GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Acute Inhalation Toxicity - Vapors	Category 4
Skin Corrosion/Irritation	Category 2
Serious Eye Damage/Eye Irritation	Category 2
Respiratory Sensitization	Category 1
Skin Sensitization	Category 1
Germ Cell Mutagenicity	Category 1B

Carcinogenicity	Category 1A
Reproductive Toxicity	Category 1B
Specific Target Organ Toxicity (repeated exposure)	Category 2
Target Organs - Cardiovascular system, Blood	

## 2.2 GHS Label elements, including precautionary statements

Pictogram	
Signal Word	Danger
Hazard statements	<p>Causes skin irritation.</p> <p>Causes serious eye irritation.</p> <p>May cause an allergic skin reaction.</p> <p>May cause damage to organs through prolonged or repeated exposure.</p> <p>Harmful if inhaled.</p> <p>May cause allergy or asthma symptoms or breathing difficulties if inhaled.</p> <p>May cause genetic defects.</p> <p>May cause cancer.</p> <p>May damage fertility; may damage the unborn child.</p>
Precautionary statements	<p>Prevention: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Use only outdoors or in a well-ventilated area. Wash face, hands, and any exposed skin thoroughly after handling. In case of inadequate ventilation wear respiratory protection. Contaminated work clothing should not be allowed out of the workplace. Do not breathe dust/fume/gas/mist/vapors/spray. Wear protective gloves/protective clothing/eye protection/face protection.</p> <p>Response: IF exposed or concerned, get medical attention/advice.</p> <p>IF INHALED: 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.</p> <p>IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing and wash before reuse. If skin irritation or rash occurs: Get medical advice/attention.</p> <p>IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.</p>

Storage: Store locked up.

Disposal: Dispose of contents/container to an approved waste disposal plant.

## 2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

Harmful to aquatic life with long lasting effects.

WARNING: Cancer and Reproductive Harm.

## SECTION 3: Composition/information on ingredients

### 3.1 Components

Chemical name	Common name and synonyms	CAS number	Concentration
Water	Aqua: H <sub>2</sub> O	7732-18-5	>95%
Potassium dichromate	Potassium bichromate	7778-50-9	1-5%

## SECTION 4: First aid measures

### 4.1 Description of first-aid measures

#### General advice

- If inhaled** If not breathing, give artificial respiration. Remove to fresh air. Get medical attention if symptoms occur.
- In case of skin contact** Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists, call a physician.
- In case of eye contact** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.
- If swallowed** Clean mouth with water and drink afterwards plenty of water.

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

May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause allergic skin reaction. Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated. Ingestion causes severe swelling, severe damage to the delicate tissue, and danger of perforation. Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain, or flushing.

### 4.3 Indication of any immediate medical attention and special treatment needed

If symptoms persist, call a physician. Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

**Suitable extinguishing media** Not combustible. CO<sub>2</sub>, dry chemical, dry sand, alcohol-resistant foam.

**Unsuitable extinguishing media** No information available.

### 5.2 Specific hazards arising from the substance or mixture

Thermal decomposition can lead to release of irritating gases and vapors. The product causes burns of eyes, skin, and mucous membranes.

Hazardous Combustion Products: Potassium oxides. Chromium oxide.

### 5.3 Special protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

### 5.4 Further information

**Flash Point** No information available.

**Autoignition Temperature** No information available.

#### Explosion limits

**Upper** No data available.

**Lower** No data available.

**Sensitivity to Mechanical Impact** No information available.

**Sensitivity to Static Discharge** No information available.

#### NFPA

Health	Flammability	Instability	Physical hazards
4	0	0	N/A

## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Use personal protective equipment as required.

### 6.2 Environmental precautions

Should not be released into the environment. See Section 12 for additional Ecological Information. Avoid release to the environment. Collect spillage. Do not flush into surface water or sanitary sewer system. Do not allow material to contaminate ground water system.

### 6.3 Methods and materials for containment and cleaning up

Soak up with inert absorbent material. Keep in suitable, closed containers for disposal.

## 6.4 Reference to other sections

See Section 2 for full list of hazard and precaution statements.

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

#### Precautions on safe handling

Wear personal protective equipment/face protection. Do not get in eyes, on skin, or on clothing. Ensure adequate ventilation. Avoid ingestion and inhalation.

#### Hygiene measures

Handle in accordance with good industrial hygiene and safety practice.

### 7.2 Conditions for safe storage, including any incompatibilities

#### Storage conditions

Corrosives area. Keep containers tightly closed in a dry, cool, and well-ventilated place.

#### Incompatibilities

Acids.

## SECTION 8: Exposure controls/personal protection

### 8.1 Occupational exposure limits

#### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Component	Type	Value
Potassium dichromate	(Vacated) Ceiling	0.1 mg/m <sup>3</sup>
	Ceiling	0.1 mg/m <sup>3</sup>

#### US. ACGIH Threshold Limit Values

Component	Type	Value
Potassium dichromate	TWA	0.0002 mg/m <sup>3</sup>
	STEL	0.0005 mg/m <sup>3</sup>

#### US. NIOSH: Pocket Guide to Chemical Hazards

Component	Type	Value
Potassium dichromate	IDLH	15 mg/m <sup>3</sup>
	TWA	0.0002 mg/m <sup>3</sup>

#### Biological occupational exposure limits

No information available.

### 8.2 Exposure controls

### Appropriate engineering controls

Ensure that eyewash stations and safety showers are close to the workstation location.

### Personal protective equipment

#### Eye/face protection

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

#### Skin protection

Wear appropriate protective gloves and clothing to prevent skin exposure.

#### Body Protection

Wear appropriate protective gloves and clothing to prevent skin exposure.

#### Respiratory protection

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Recommended Filter type: Organic gases and vapours filter. Particulates filter conforming to EN 143.

#### Control of environmental exposure

No information available.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Physical State	Liquid
Appearance	Orange
Odor	Odorless
Odor Threshold	No information available
pH	No information available
Melting Point/Range	No data available
Boiling Point/Range	No information available
Evaporation Rate	No information available
Flammability (solid)	Not applicable
Flammability or explosive limit	No data available
Upper	
Lower	
Vapor Pressure	No information available
Vapor Density	No information available
Density	No information available

Solubility	No information available
Partition coefficient; n-octanol/water	No data available
Autoignition Temp	No information available
Decomposition Temp	No information available
Viscosity	No information available
Molecular Formula	Cr2 K2 O7
Molecular Weight	294.18 g/mol
VOC Content(%)	No information available
Oxidizing properties	No information available

## 9.2 Other safety information

No information available.

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

No information available.

### 10.2 Chemical stability

Stable under normal conditions.

### 10.3 Possibility of hazardous reactions

None under normal processing.

### 10.4 Conditions to avoid

Incompatible products.

### 10.5 Incompatible materials

Acids.

### 10.6 Hazardous decomposition products

Potassium oxides, Chromium oxide.

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Product Information, Component Information

#### Acute toxicity

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Potassium dichromate	130 mg/kg (Rat)	1150 mg/kg (Rabbit)	0.09 mg/L/4h (Rat)

#### Skin corrosion/irritation

No information available.

**Serious eye damage/eye irritation**

No information available.

**Respiratory or skin sensitization**

No information available.

**Germ cell mutagenicity**

No information available.

**Carcinogenicity**

Component	CAS	IARC	NTP	ACGIH	OSHA	Mexico
Water	7732-18-5	Not listed	Not listed	Not listed	Not listed	Not listed
Potassium dichromate	7778-50-9	Group 1	Known	A1	X	A1

**Specific target organ toxicity - single exposure**

None known.

**Specific target organ toxicity - repeated exposure**

Cardiovascular system, Blood.

**Reproductive toxicity**

No information available.

**Chronic effects**

Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated. Ingestion causes severe swelling, severe damage to the delicate tissue, and danger of perforation. Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain, or flushing.

**11.2 Additional Information**

The toxicological properties have not been fully investigated.

**SECTION 12: Ecological information****12.1 Toxicity**

Toxic to aquatic organisms; may cause long-term adverse effects in the aquatic environment. The product contains following substances which are hazardous for the environment. Do not allow material to contaminate ground water system.

Product		Species	Test Results
	LC50	Pimephales promelas	14 - 20.9 mg/L, 96h static 15.41 - 30.36 mg/L, 96h flow-through
	LC50	Poecilia reticulata	23 - 41.2 mg/L, 96h static 24.81 - 34.55 mg/L, 96h semi-static



Potassium dichromate	LC50	Cyprinus carpio	> 139 mg/L, 96h static
	LC50	Lepomis macrochirus	320 mg/L, 96h 65.6 - 137.6 mg/L, 96h static 113.6 - 155.7 mg/L, 96h flow-through
	LC50	Oncorhynchus mykiss	12.3 mg/L, 96h semi-static
	LC50	Oryzias latipes	21.209 - 30.046 mg/L, 96h semi-static
	EC50	Water Flea	1.4 mg/L 24h

## 12.2 Persistence and degradability

May persist based on information available.

## 12.3 Bio accumulative potential

No information available.

## 12.4 Mobility in soil

Will likely be mobile in the environment due to its water solubility.

## 12.5 Results of PBT and vPvB assessment

No information available.

## 12.6 Endocrine disrupting properties

No information available.

## 12.7 Other adverse effects

No information available.

## SECTION 13: Disposal considerations

### 13.1 Waste Disposal Methods

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 to ensure complete and accurate classification.

## SECTION 14: Transport information

**DOT (US)** Not regulated.

**IMDG** Not regulated.

**IATA** Not regulated.

## SECTION 15: Regulatory information

**US federal regulations** This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

Listed, Potassium dichromate (CAS #7778-50-9), Section 6.

**CERCLA Hazardous Substance List (40 CFR 302.4)**

Listed, Potassium dichromate (CAS #7778-50-9), RQ: 10 lb.

**SARA 304 Emergency release notification**

Not regulated.

**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)**

Listed, Potassium dichromate (CAS #7778-50-9).

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

**SARA 302 Extremely hazardous substance**

Not listed.

**SARA 311/312 Hazardous**

See Section 2 for more information.

**SARA 313 (TRI reporting)**

Listed, Potassium dichromate (CAS #7778-50-9).

**Other federal regulations**

**Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Listed, Potassium dichromate (CAS #7778-50-9).

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

Not regulated.

**Clean Water Act (CWA)**

Listed, Potassium dichromate (CAS #7778-50-9), RQ: 10 lb.

**FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace**

Not listed.

**US state regulations**

**US. Massachusetts RTK - Substance List**

Listed, Potassium dichromate (CAS #7778-50-9).

**US. New Jersey Worker and Community Right-to-Know Act**

Listed, Potassium dichromate (CAS #7778-50-9).

**US. Pennsylvania Worker and Community Right-to-Know Law**

Listed, Potassium dichromate (CAS #7778-50-9).

## California Proposition 65

Listed, Potassium dichromate (CAS #7778-50-9).

### SECTION 16: Other information

Issue date: 11/07/2024

### SECTION 17: Disclaimer

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text.