



HI-VALLEY CHEMICAL

LABORATORY PRODUCTS

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SDS
Hi Valley Chemical

Potassium Permanganate

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PRODUCT AND COMPANY IDENTIFICATION

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HAZARDS IDENTIFICATION

Classification of Substance

GHS Classification in Accordance with 29 CFR 1910 (OSHA HCS):

Physical, Oxidizing Solids, 2
Health, Acute toxicity, 4 Oral
Health, Skin corrosion/irritation, 1
Health, Serious Eye Damage/Eye Irritation, 1
Environmental, Hazards to the aquatic environment - Chronic, 1

GHS Label Elements, Including Precautionary Statements

GHS Signal Word: DANGER

GHS Hazard Pictograms:



GHS Hazard Statements:

H272 - May intensify fire; oxidizer
H302 - Harmful if swallowed
H314 - Causes severe skin burns and eye damage
H318 - Causes serious eye damage
H410 - Very toxic to aquatic life with long lasting effects

GHS Precautionary Statements:

P220 - Keep/Store away from clothing/combustible materials.
P273 - Avoid release to the environment.
P221 - Take any precaution to avoid mixing with combustibles.
P260 - Do not breathe dust/fume/gas/mist/vapors/spray.
P264 - Wash skin thoroughly after handling.
P270 - Do not eat, drink or smoke when using this product.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P301+330+331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+361+353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305+351+338 - IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
P363 - Wash contaminated clothing before reuse.
P370+378 - In case of fire: Use _ for extinction.
P405 - Store locked up.
P501 - Dispose of contents/container to approved waste disposal.

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COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Ingredients		
CAS#	%	Chemical Name
7722-64-7	100%	Potassium permanganate

4 FIRST AID MEASURES

- Inhalation:** If inhaled, move person to fresh air. If not breathing, give artificial respiration. Consult a physician.
- Skin Contact:** Remove contaminated clothing immediately. Wash with soap and water. Consult a physician.
- Eye Contact:** Immediately flush eyes with large amounts of water for at least 15 minutes, lifting eyelids occasionally to facilitate irrigation.
Consult a physician.
- Ingestion:** Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

5 FIRE FIGHTING MEASURES

Extinguishing media
Suitable extinguishing media
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special hazards arising from the substance or mixture
No data available

Advice for firefighters
Wear self-contained breathing apparatus for firefighting if necessary.

Further information
Use water to cool unopened containers.

6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:

Wear respiratory protection. Avoid dust formation. Avoid breathing dust, vapours, mist or gas. Ensure adequate ventilation.

Environmental precautions:

Do not let product enter drains.

Methods and materials for containment and cleaning up:

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

7 HANDLING AND STORAGE

Handling Precautions: Avoid contact with eyes, skin, or clothing. Avoid formation of dust and aerosols. Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into consideration before additional processing occurs. Provide appropriate exhaust ventilation at places where dust is formed. Provide appropriate exhaust ventilation at places where dust is formed. Keep away from sources of ignition. No smoking.

Storage Requirements: Keep container tightly closed. Store in cool/dry area.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Personal Protective Equipment: Potassium permanganate cas#:(7722-64-7) [100%]

Personal protective equipment

Respiratory protection: 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. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand protection: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching gloves outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. Immersion protection Material: Nitrile rubber Minimum layer thickness: 0.11 mm Break through time: > 480 min Material tested: Dermatril (Aldrich Z677272, Size M)

Splash protection: Material: Nitrile rubber Minimum layer thickness: 0.11 mm Break through time: > 30 min Material tested: Dermatril (Aldrich Z677272, Size M) data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 873000, e-mail sales@kcl.de, test method: EN374 If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an Industrial Hygienist familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

Eye protection: Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin and body protection: Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Hygiene measures: Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Potassium permanganate cas#:(7722-64-7) [100%]

Components with workplace control parameters

CEIL 5 mg/m3 USA. Occupational Exposure Limits (OSHA) - Table Z- 1
Limits for Air Contaminants

CEIL 5 mg/m3 USA. OSHA - TABLE Z-1 Limits for Air Contaminants -
1910.1000

TWA 0.2 mg/m3 USA. ACGIH Threshold Limit Values (TLV)

C 5 mg/m3 USA. Occupational Exposure Limits (OSHA) - Table Z- 1
Limits for Air Contaminants

Ceiling limit is to be determined from breathing-zone air samples.

TWA 0.2 mg/m3 USA. ACGIH Threshold Limit Values (TLV)
Central Nervous System impairment Adopted values or notations enclosed are those for which
changes are proposed in the NIC See Notice of Intended Changes (NIC) varies

C 5 mg/m3 USA. OSHA - TABLE Z-1 Limits for Air Contaminants -
1910.1000

TWA 1 mg/m3 USA. NIOSH Recommended Exposure Limits

ST 3 mg/m3 USA. NIOSH Recommended Exposure Limits

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PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Crystalline
Physical State:	Dark Violet Powder
Odor:	None
Odor Threshold:	No data available
Molecular Formula:	No data available
Particle Size:	No data available

Solubility:	28.3 g/l at 0 °C (32 °F)65.1 g/l at 20 °C (68 °F)125 g/l at 40 °C (104 °F)224 g/l at 60 °C (140 °F)
Specific Gravity or Density:	2.710 g/cm ³
Softening Point:	No data available
Viscosity:	No data available
Percent Volatile:	No data available
Heat Value:	No data available
Boiling Point:	No data available
Freezing or Melting Point:	Melting point/range: > 240 °C (> 464 °F) - Decomposes on heating.
Flammability:	No data available
Flash Point:	No data available
Partition Coefficient:	No data available
Vapor Pressure:	No data available
Vapor Density:	No data available
Potentia Hydrogenii:	7.2 - 9.7 at 20 g/l at 20 °C (68 °F)
Volatile organic compound:	No data available
Evaporation Rate:	No data available
Bulk Density:	No data available
Molecular weight:	No data available
Autoignition Temperature:	No data available
Decompression Temperature:	> 240 °C (> 464 °F)
Upper Flammability Limit and Lower Flammability Limit:	No data available

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STABILITY AND REACTIVITY

Chemical Stability:	Stable under recommended storage conditions.
Conditions to Avoid Identification:	No data available
Materials to Avoid Identification:	Strong reducing agents, Powdered metals, Peroxides, Zinc, Copper, Alcohols, Hydrogen fluoride, Acids, Sulfuric acid

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TOXICOLOGICAL INFORMATION

Potassium permanganate cas#:(7722-64-7) [100%]

Information on toxicological effects

Acute toxicity:

Oral LD50 LD50 Oral - rat - 1,090 mg/kg

Inhalation LC50 no data available

Dermal LD50

Other information on acute toxicity

Skin corrosion/irritation: no data available

Serious eye damage/eye irritation: no data available

Respiratory or skin sensitization: no data available

Germ cell mutagenicity: no data available

Carcinogenicity:

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity: no data available

Teratogenicity: no data available

Specific target organ toxicity - single exposure (Globally Harmonized System):
no data available

Specific target organ toxicity - repeated exposure (Globally Harmonized System):
no data available

Aspiration hazard: no data available

Potential health effects: Inhalation May be harmful if inhaled. May cause respiratory tract irritation. Ingestion Harmful if swallowed. Skin Harmful if absorbed through skin. May cause skin irritation. Eyes May cause eye irritation.

Signs and Symptoms of Exposure: Contact with skin can cause:, Oedema, Necrosis, Effects due to ingestion may include:, methemoglobinemia, psychological disturbances

Synergistic effects: no data available

Additional Information:

RTECS: SD6475000

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ECOLOGICAL INFORMATION

Potassium permanganate cas#:(7722-64-7) [100%]

Information on ecological effects

Toxicity:

Toxicity to fish LC50 - Oncorhynchus mykiss (rainbow trout) - 0.3 - 0.6 mg/l - 96.0 h.

Toxicity to daphnia EC50 - Daphnia magna (Water flea) - 0.084 mg/l - 48 h.

and other aquatic invertebrates

Persistence and degradability: no data available

Bioaccumulative potential: no data available

Mobility in soil: no data available

PBT and vPvB assessment: no data available

Other adverse effects: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Very toxic to aquatic life.

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DISPOSAL CONSIDERATIONS

Dispose of in accordance with local regulations.

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TRANSPORT INFORMATION

UN1490, Potassium permanganate, 5.1, PGI

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REGULATORY INFORMATION

Component (CAS#) [%] - CODES

Potassium permanganate (7722-64-7) [100%] CERCLA, CSWHS, MASS, PA, TSCA, TXAIR

Regulatory CODE Descriptions

CERCLA = Superfund clean up substance

CSWHS = Clean water Act Hazardous substances

MASS = MA Massachusetts Hazardous Substances List

PA = PA Right-To-Know List of Hazardous Substances

TSCA = Toxic Substances Control Act

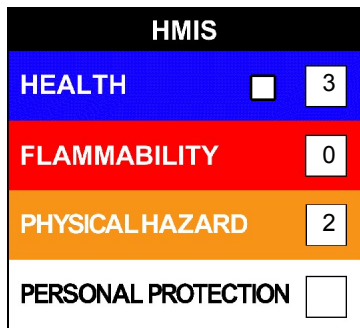
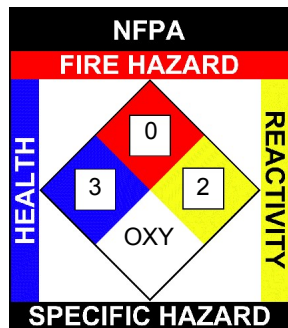
TXAIR = TX Air Contaminants with Health Effects Screening Level

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OTHER INFORMATION

NFPA: Health = 3, Fire = 0, Reactivity = 2, Specific Hazard = OXY

HMIS III: Health = 3, Fire = 0, Physical Hazard = 2



Disclaimer:

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