SAFETY DATA SHEET

GENERAL STORAGE CODE GREEN

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Section 1 Ch

Chemical Product and Company Identification

ward's science

 Boreal Science

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Product POTASSIUM PERMANGANATE, 0.01 MOLAR SOLUTION

Hazards Identification

Synonyms Potassium Permanganate, Water Solution

Section 2

Signal word: WARNING Pictograms: GHS09 Target organs: None known



GHS Classification: Acute toxicity, ingestion (Category 5) Aquatic acute (Category 1) Aquatic chronic (Category 1)

GHS Label information: Hazard statement:

H303: May be harmful if swallowed.

H410: Very toxic to aquatic life with long lasting effects.

Precautionary statement:

P273: Avoid release to the environment.

P312: Call a POISON CENTER or doctor if you feel unwell.

P391: Collect spillage.

P501: Dispose of contents/container to a licensed chemical disposal agency in accordance with local/regional/national regulations.

Hazards not otherwise classified:

Health hazards not otherwise classified (HHNOC) - Not Known Physical hazards not otherwise classified (PHNOC) - Not Known

Section 3 Composition / Information on Ingredients								
Chemical Name	CAS #	%	EINECS					
Water Potassium permanganate	7732-18-5 7722-64-7	99.85% 0.15%	231-791-2 231-760-3					
Section 4 First Aid Measu	res							

Section 4 First Aid Measures

INGESTION: MAY BE HARMFUL IF SWALLOWED. Call physician or Poison Control Center immediately. Induce vomiting only if advised by appropriate medical personnel. Never give anything by mouth to an unconscious person.

INHALATION: MAY BE HARMFUL IF INHALED. Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

EYE CONTACT: MAY CAUSE IRRITATION. Check for and remove contact lenses. Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention.

SKIN ABSORPTION: MAY CAUSE IRRITATION. Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention.

Section 5 Fire Fighting Measures

Suitable Extinguishing Media: Use any media suitable for extinguishing supporting fire.

Protective Actions for Fire-fighters: In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus and full protective gear. Use water spray to keep fire-exposed containers cool.

Specific Hazards: In fire conditions, water may evaporate from this soltuion which may cause hazardous decompostion products to be formed as dust or fume.

Section 6 Accidental Release Measures

Personal Precautions: Evacuate personnel to safe area. Use proper personal protective equipment as indicated in Section 8. Provide adequate ventilation. Environmental Precautions: Avoid runoff into storm sewers and ditches which lead to waterways.

Containment and Cleanup: Absorb with inert dry material, sweep or vacuum up and place in a suitable container for proper disposal. Wash spill area with soap and water.

CHEMTREC 24 Hour Emergency USA Phone Number (800) 424-9300

1 703-741-5500 (from anywhere in the world). For laboratory and industrial use only. Not for drug, food or household use.

Section 7 Handling & Storage Page E2 of E2

Precautions for Safe Handling: Read label on container before using. Do not wear contact lenses when working with chemicals. Keep out of reach of children. Avoid contact with eyes, skin and clothing. Do not inhale vapors, spray or mist. Use with adequate ventilation. Avoid ingestion. Wash thoroughly after handling. Remove and wash clothing before reuse.

Conditions for Safe Storage: Store in a cool, well-ventilated area away from incompatible substances.

Section 8	Exposure Controls / Personal Protection						
Exposure Limits:	Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)			
	Manganese and inorganic compounds, as Mn	TWA: 0.2 mg/m ³ (A4)	STEL: C 5 mg/m ³	TWA: 1 mg/m ³ / STEL: 3 mg/m ³			

Engineering controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower and fire extinguishing material. Personnel should wear safety glasses, goggles, or faceshield, lab coat or apron, appropriate protective gloves. Use adequate ventilation to keep airborne concentrations low.

Respiratory protection: None should be needed in normal laboratory handling at room temperatures. If misty conditions prevail, work in fume hood or wear a NIOSH/MSHAapproved respirator.

approved respirator.							
Section 9	Physical & Chemical Prope	rties					
Appearance: Liquid, j Odor: No odor. Odor threshold: Data pH: Data not available Melting / Freezing point: A Boiling point: Approxin Flash point: Data not	Evaporation rate (Water = 1): <1			Auto-ignit Decompos Viscosity: Molecular	Partition coefficient: Data not available Auto-ignition temperature: Data not available Decomposition temperature: Data not available. Viscosity: Data not available. Molecular formula: Mixture Molecular weight: Mixture		
Section 10	Stability & Reactivity						
Chemical stability: Stable Hazardous polymerization: Will not occur. Conditions to avoid: Excessive temperatures which cause evaporation. Incompatible materials: Alcohols, arsenites, bromides, iodides, charcoal, hydrochloric acid, organic materials, ferrous or mercurous salts, hypophosphites, hyposulfites, sulfites, peroxides, oxalates, strong reducing agents, strong acids, formaldehyde, ethylene glycol, combustible organics, metal powders.							
	sition products: Oxygen, oxide	0			, I		
Section 11	Toxicological Information						
Acute toxicity: Oral-rat LD50: 750 mg/kg [Potassium permanganate] Skin corrosion/irritation: Data not available Serious eye damage/irritation: Data not available Respiratory or skin sensitization: Data not available Germ cell mutagenicity: Data not available Carcinogenity: Data not available 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. IARC: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by NTP. IARC: 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: Data not available STOT-single exposure: Data not available STOT-repeated exposure: Data not available Aspiration hazard: Data not available Potential health effects: Inhalation: May be harmful if iswallowed. Skin: Contact causes irritation. Eyes: Contact causes irritation. Eyes: Contact causes irritation. Signs and symptoms of exposure: To the best of our knowledge the chemical, physical and toxicological properties have not been thoroughly investigated. Specific data is not available. Exercise appropriate procedures to minimize potential hazards.							
Section 12	Ecological Information						
Toxicity to fish: Gambusia affinis (fish, fresh water), LC100 = 18 mg/L/24 hours [Potassium permanganate] Toxicity to daphnia and other aquatic invertebrates: Daphnia magna (Crustacea), EC0 = >0.63 mg/L [Potassium permanganate] Toxicity to algae: Anabaena sp. (Algae), EC50 = <0.5 mg/L/18 days/growth rate [Potassium permanganate]							
These disposal guidelines are intended for the disposal of catalog-size quantities only. Federal regulations may apply to empty container. State and/or local regulations may be different. Dispose of in accordance with all local, state and federal regulations or contract with a licensed chemical disposal agency.							
Section 14 Transport Information (US DOT / CANADA TDG)							
UN/NA number: Not applicable Shipping name: Not Regulated Hazard class: Not applicable Packing group: Not applicable Reportable Quantity: *See Below Marine pollutant: No Exceptions: Not applicable 2016 ERG Guide # Not applicable Reportable Quantity: *See Below Marine pollutant: No							
Section 15 Regulatory Information							
	o be listed if the CAS number for the	•		DODA :	50.		04 D
Componen	ι	TSCA	CERLCA (RQ)	RCRA code	DSL	NDSL	CA Prop 65
Potassium permangan		Listed	*100 lbs (45.4 kg)	D001	Listed	Not listed	This product does not contain any chemicals known to the State of California to cause cancer or reproductive toxicity.
Section 16	Other Information						

The information contained herein is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. NTP: National Toxicology Program, IARC: International Agency for Research on Cancer, OSHA: Occupational Safety and Health Administration, STOT: Specific Target Organ Toxicity, SE: Single Exposure, RE: Repeated Exposure, ERG: Emergency Response Guidebook. Form 06/2015