

Safety Data Sheet according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 02/04/2014 Revision date: 02/13/2018

Supersedes: 02/13/2018

Version: 1.1

SECTION 1: Identificat					
	ion				
1.1. Identification					
Product form	:	Substance			
Substance name	:	Potassium Per	rmanganate		
CAS-No.	:	7722-64-7	0		
Product code	:	LC19850			
Formula	:				
Synonyms	:	-	of potash / potassium salt p	ermanganic acid	
	e and restrictions on				
Use of the substance/mixture	:	Oxidant Bleaching age Reagent Disinfectant Deodorizer Algicide Dyestuff/pigme Medicine Laboratory che Food industry: Insecticide Germicide	ent: component emical		
Recommended use	:	Laboratory che	emicals		
Restrictions on use		-	rug or household use		
1.3. Supplier			0		
	chem.com				
1.4.         Emergency telepho           Emergency number         Emergency number	one number	CHEMTREC:	1-800-424-9300 or 011-703-{	527-3887	
1.4. Emergency telepho Emergency number SECTION 2: Hazard(s)	one number identification		1-800-424-9300 or 011-703-{	527-3887	
1.4. Emergency telepho Emergency number SECTION 2: Hazard(s)	one number		1-800-424-9300 or 011-703-{	527-3887	
1.4.       Emergency telepho         Emergency number         SECTION 2: Hazard(s)         2.1.       Classification of th	one number identification		1-800-424-9300 or 011-703-8	327-3887	
1.4.       Emergency telepho         Emergency number         SECTION 2: Hazard(s)         2.1.       Classification of th         GHS-US classification         Oxidizing solids Category 2         Acute toxicity (oral)	one number identification	ure May in	1-800-424-9300 or 011-703-{ itensify fire; oxidizer ul if swallowed	527-3887	
1.4.       Emergency telepho         Emergency number         SECTION 2: Hazard(s)         2.1.       Classification of th         GHS-US classification         Oxidizing solids Category 2         Acute toxicity (oral)         Category 4         Hazardous to the aquatic         environment - Acute	identification is substance or mixt H272	ure May in Harmfi	tensify fire; oxidizer	;27-3887	
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<ul> <li>1.4. Emergency telephot</li> <li>Emergency number</li> <li>SECTION 2: Hazard(s)</li> <li>2.1. Classification of th</li> <li>GHS-US classification</li> <li>Oxidizing solids Category 2</li> <li>Acute toxicity (oral)</li> <li>Category 4</li> <li>Hazardous to the aquatic</li> <li>environment - Acute</li> <li>Hazardous to the aquatic</li> <li>environment - Chronic</li> <li>Hazard Category 1</li> <li>Hazard Category 1</li> <li>Hazardous to the aquatic</li> <li>environment - Chronic</li> <li>Hazard Category 1</li> <li>Full text of H statements : see</li> </ul>	identification ie substance or mixt H272 H302 H400 H410	ure May in Harmfi Very to Very to	tensify fire; oxidizer ul if swallowed oxic to aquatic life oxic to aquatic life with long la		
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	H410 - Very toxic to aquatic life with long lasting effects			
Precautionary statements (GHS-US)	<ul> <li>P210 - Keep away from heat, sparks, open flames, hot surfaces No smoking.</li> <li>P220 - Keep/Store away from clothing, combustible materials</li> <li>P221 - Take any precaution to avoid mixing with combustibles</li> <li>P264 - Wash exposed skin thoroughly after handling.</li> <li>P270 - Do not eat, drink or smoke when using this product.</li> <li>P273 - Avoid release to the environment.</li> <li>P280 - Wear protective gloves, protective clothing, eye protection, face protection.</li> <li>P301+P312 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.</li> <li>P330 - If swallowed, rinse mouth</li> <li>P391 - Collect spillage.</li> <li>P501 - Dispose of contents/container to comply with local, state and federal regulations</li> </ul>			
2.3. Other hazards which do not res	ult in classification			
Other hazards not contributing to the classification	: None under normal con	ditions.		
2.4. Unknown acute toxicity (GHS U	S)			
Not applicable				
SECTION 3: Composition/Information	ation on ingredients			
3.1. Substances	. Marca			
Substance type	: Mono-constituent			
Name Potassium Permanganate		(CAS-No.) 7722-64-7	% 100	GHS-US classification Ox. Sol. 2, H272
(Main constituent)		(CAS-INO.) 1122-04-1	100	Acute Tox. 4 (Oral), H302 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Full text of hazard classes and H-statements	s : see section 16			
	s : see section 16			
Not applicable	s : see section 16			
3.2. Mixtures Not applicable	s : see section 16			
3.2.       Mixtures         Not applicable         SECTION 4: First-aid measures         4.1.       Description of first aid measure	S			
<ul> <li>3.2. Mixtures</li> <li>Not applicable</li> <li>SECTION 4: First-aid measures</li> <li>4.1. Description of first aid measure</li> <li>First-aid measures general</li> </ul>	<ul> <li>Check the vital functions arrest: artificial respirati with labored breathing: Vomiting: prevent asphy warming up). Keep wato physical strain. Depend</li> </ul>	on or oxygen. Cardiac arres half-seated. Victim in shock yxia/aspiration pneumonia. ching the victim. Give psych ing on the victim's conditior	st: perform <: on his ba Prevent conological ain : doctor/ho	•
3.2.       Mixtures         Not applicable       SECTION 4: First-aid measures         SECTION 4: First-aid measures       All measures         4.1.       Description of first aid measures         First-aid measures general       First-aid measures after inhalation	<ul> <li>Check the vital functions arrest: artificial respirati with labored breathing: Vomiting: prevent asphy warming up). Keep wato physical strain. Depend</li> <li>Remove the victim into</li> <li>Wash immediately with agents. Remove clothin</li> </ul>	on or oxygen. Cardiac arres half-seated. Victim in shock yxia/aspiration pneumonia. ching the victim. Give psych ing on the victim's condition fresh air. Respiratory proble lots of water (15 minutes)/s g while washing. Do not rei	st: perform k: on his ba Prevent con nological ai h: doctor/ho ems: consumers: cons	resuscitation. Victim conscious ack with legs slightly raised. poling by covering the victim (no id. Keep the victim calm, avoid
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B.2. Mixtures         Not applicable         SECTION 4: First-aid measures         SECTION 4: First-aid measures         A.1. Description of first aid measure         First-aid measures general         First-aid measures after inhalation         First-aid measures after skin contact         First-aid measures after eye contact         First-aid measures after ingestion	<ul> <li>Check the vital functions arrest: artificial respiration with labored breathing: Vomiting: prevent asphy warming up). Keep wate physical strain. Depend</li> <li>Remove the victim into</li> <li>Wash immediately with agents. Remove clothin wounds with sterile ban victim to hospital.</li> <li>Rinse immediately with victim to an ophthalmold</li> <li>Rinse mouth with water vomiting. Immediately c (www.big.be/antigif.htm quantities: immediately</li> </ul>	on or oxygen. Cardiac arres half-seated. Victim in shock yxia/aspiration pneumonia. ching the victim. Give psych ing on the victim's condition fresh air. Respiratory proble lots of water (15 minutes)/s g while washing. Do not ren dage. Consult a doctor/med plenty of water for 15 minute ogist. . Immediately after ingestio onsult a doctor/medical ser ). Take the container/vomit	st: perform c: on his ba Prevent cc hological ai n: doctor/ho ems: consu- shower. Do move cloth dical service tes. Do not n: give lots vice. Call I	resuscitation. Victim conscious ack with legs slightly raised. poling by covering the victim (no id. Keep the victim calm, avoid ospital. ult a doctor/medical service. not apply (chemical) neutralizing ing if it sticks to the skin. Cover ee. If burned surface > 10%: take t apply neutralizing agents. Take of water to drink. Do not induce Poison Information Centre
Baseline       Mixtures         Not applicable       SECTION 4: First-aid measures         SECTION 4: First-aid measures       Section of first aid measures         4.1.       Description of first aid measures         First-aid measures general       Section         First-aid measures after inhalation       Section contact         First-aid measures after eye contact       Section         First-aid measures after ingestion       Section         4.2.       Most important symptoms and other	<ul> <li>Check the vital functions arrest: artificial respirati with labored breathing: Vomiting: prevent asphy warming up). Keep wate physical strain. Depend</li> <li>Remove the victim into</li> <li>Wash immediately with agents. Remove clothin wounds with sterile ban victim to hospital.</li> <li>Rinse immediately with victim to an ophthalmole</li> <li>Rinse mouth with water vomiting. Immediately c (www.big.be/antigif.htm quantities: immediately</li> <li>AFTER INHALATION C Irritation of the nasal mu</li> </ul>	on or oxygen. Cardiac arres half-seated. Victim in shock xia/aspiration pneumonia. ching the victim. Give psych ing on the victim's condition fresh air. Respiratory proble lots of water (15 minutes)/s g while washing. Do not red dage. Consult a doctor/med plenty of water for 15 minut ogist. . Immediately after ingestio onsult a doctor/medical ser ). Take the container/vomit to hospital. DF DUST: Dry/sore throat. C ucous membranes. EXPOS	st: perform c: on his ba Prevent cc nological ai a: doctor/ho ems: consu- shower. Do move cloth dical service tes. Do nol n: give lots vice. Call f to the doc Coughing. I URE TO H	resuscitation. Victim conscious ack with legs slightly raised. poling by covering the victim (no id. Keep the victim calm, avoid ospital. ult a doctor/medical service. not apply (chemical) neutralizing ing if it sticks to the skin. Cover ee. If burned surface > 10%: take t apply neutralizing agents. Take of water to drink. Do not induce Poison Information Centre
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Baseline       Mixtures         Not applicable       SECTION 4: First-aid measures         SECTION 4: First-aid measures       Section of first aid measures         4.1.       Description of first aid measures         First-aid measures general       Section         First-aid measures after inhalation       Section         First-aid measures after skin contact       Section         First-aid measures after eye contact       Section         First-aid measures after ingestion       Section	<ul> <li>Check the vital function: arrest: artificial respiration with labored breathing: Vomiting: prevent asphy warming up). Keep wate physical strain. Depend</li> <li>Remove the victim into</li> <li>Wash immediately with agents. Remove clothin wounds with sterile ban victim to hospital.</li> <li>Rinse immediately with victim to an ophthalmold</li> <li>Rinse mouth with water vomiting. Immediately c (www.big.be/antigif.htm quantities: immediately</li> <li>AFTER INHALATION C Irritation of the nasal mu Respiratory difficulties.</li> <li>Tingling/irritation of the is Caustic burns/corrosion</li> <li>Corrosion of the eye tiss</li> </ul>	on or oxygen. Cardiac arres half-seated. Victim in shock xia/aspiration pneumonia. ching the victim. Give psych ing on the victim's condition fresh air. Respiratory proble lots of water (15 minutes)/s g while washing. Do not rer dage. Consult a doctor/med plenty of water for 15 minut ogist. . Immediately after ingestio onsult a doctor/medical ser ). Take the container/vomit to hospital. DF DUST: Dry/sore throat. Co cous membranes. EXPOS FOLLOWING SYMPTOMS skin. May stain the skin. Of	st: perform c: on his ba Prevent cc nological ai n: doctor/ho ems: consu- shower. Do move cloth dical service tes. Do noi n: give lots vice. Call F to the doc Coughing. I URE TO H MAY APP N CONTIN	resuscitation. Victim conscious ack with legs slightly raised. boling by covering the victim (no id. Keep the victim calm, avoid ospital. ult a doctor/medical service. not apply (chemical) neutralizing ing if it sticks to the skin. Cover e. If burned surface > 10%: take t apply neutralizing agents. Take t apply neutralizing agents. Take s of water to drink. Do not induce Poison Information Centre tor/hospital. Ingestion of large rritation of the respiratory tract. IIGH CONCENTRATIONS: EAR LATER: Risk of lung edema UOUS EXPOSURE/CONTACT:

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according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations ON CONTINUOUS/REPEATED EXPOSURE/CONTACT: Respiratory difficulties. Impairment of Chronic symptoms the nervous system. Movement disturbances. Coordination disorders. Myasthenia. Tremor. Paralysis. Cramps/uncontrolled muscular contractions. Impaired memory. Emotional instability. 4.3. Immediate medical attention and special treatment, if necessary No additional information available SECTION 5: Fire-fighting measures 5.1. Suitable (and unsuitable) extinguishing media Suitable extinguishing media : Adapt extinguishing media to the environment. Preferably: quantities of water. Unsuitable extinguishing media : No unsuitable extinguishing media known. 5.2. Specific hazards arising from the chemical Fire hazard : DIRECT FIRE HAZARD. Non combustible. INDIRECT FIRE HAZARD. Promotes combustion. Reactions involving a fire hazard: see "Reactivity Hazard". Explosion hazard : INDIRECT EXPLOSION HAZARD. Reactions with explosion hazards: see "Reactivity Hazard". Decomposes on exposure to temperature rise: oxidation which increases fire hazard. Reacts Reactivity with combustible materials: risk of spontaneous ignition. Violent to explosive reaction with (some) acids: release of toxic and corrosive gases/vapours. Reacts violently with many compounds e.g.: with organic material and with (strong) reducers. With (some) metals. With (increased) risk of fire/explosion. Special protective equipment and precautions for fire-fighters 5.3. Precautionary measures fire : Exposure to fire/heat: keep upwind. Exposure to fire/heat: consider evacuation. **Firefighting instructions** : Cool tanks/drums with water spray/remove them into safety. Do not move the load if exposed to heat. Take account of environmentally hazardous firefighting water. Use water moderately and if possible collect or contain it. Protection during firefighting : Heat/fire exposure: compressed air/oxygen apparatus. SECTION 6: Accidental release measures Personal precautions, protective equipment and emergency procedures 6.1. 6.1.1. For non-emergency personnel Protective equipment : Gloves. Face-shield. Protective clothing. Dust cloud production: compressed air/oxygen apparatus. Dust cloud production: dust-tight suit. Reactivity hazard: compressed air/oxygen apparatus. Reactivity hazard: gas-tight suit. See "Material-Handling" to select protective clothing. Emergency procedures Mark the danger area. Prevent dust cloud formation. No naked flames. Keep containers closed. Wash contaminated clothes. In case of hazardous reactions: keep upwind. In case of reactivity hazard: consider evacuation Measures in case of dust release In case of dust production: keep upwind. Dust production: have neighbourhood close doors and windows. 6.1.2. For emergency responders Protective equipment : Equip cleanup crew with proper protection. Do not breathe dust. Emergency procedures If a major spill occurs, all personnel should be immediately evacuated and the area ventilated. Stop release. Ventilate area. 6.2. **Environmental precautions** Prevent soil and water pollution. Prevent spreading in sewers. 6.3. Methods and material for containment and cleaning up For containment : Contain released substance, pump into suitable containers. Consult "Material-handling" to select material of containers. Plug the leak, cut off the supply. Dam up the solid spill. Knock down/dilute dust cloud with water spray. If reacting: dilute toxic gas/vapour with water spray. Take account of toxic/corrosive precipitation water. Methods for cleaning up Stop dust cloud by covering with sand/earth. Scoop solid spill into closing containers. Carefully collect the spill/leftovers. Spill must not return in its original container. See "Material-handling' for suitable container materials. Clean contaminated surfaces with an excess of water. Wash

#### 6.4. Reference to other sections

No additional information available

clothing and equipment after handling.

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SECTION 7: Handling and storage	
7.1. Precautions for safe handling	
Precautions for safe handling	: Comply with the legal requirements. Remove contaminated clothing immediately. Clean contaminated clothing. Keep the substance free from contamination. Use corrosionproof equipment. Thoroughly clean/dry the installation before use. Do not discharge the waste into the drain. Avoid raising dust. Keep away from naked flames/heat. Observe very strict hygiene - avoid contact. Keep container tightly closed. Measure the concentration in the air regularly. Carry operations in the open/under local exhaust/ventilation or with respiratory protection.
7.2. Conditions for safe storage, includin	g any incompatibilities
Heat-ignition	: KEEP SUBSTANCE AWAY FROM: heat sources.
Prohibitions on mixed storage	: KEEP SUBSTANCE AWAY FROM: combustible materials. reducing agents. strong acids. metal powders. cellulosic materials. organic materials. alcohols. peroxides.
Storage area	: Store at ambient temperature. Keep out of direct sunlight. Store in a dry area. Fireproof storeroom. Unauthorized persons are not admitted. Keep only in the original container. Store only in a limited quantity. Meet the legal requirements.
Special rules on packaging	: SPECIAL REQUIREMENTS: closing. clean. correctly labelled. meet the legal requirements. Secure fragile packagings in solid containers.
Packaging materials	: SUITABLE MATERIAL: steel. aluminium. glass. stoneware/porcelain. MATERIAL TO AVOID: wood. cellusosic material.

#### SECTION 8: Exposure controls/personal protection

# 8.1. Control parameters Potassium Permanganate (7722-64-7) ACCUL TMA (mov(m2))

i otassiumi erman		
ACGIH	ACGIH TWA (mg/m <sup>3</sup> )	0.1 mg/m <sup>3</sup> (Manganese, inorganic compounds, as Mn; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value; Inhalable fraction)
OSHA	OSHA PEL (Ceiling) (mg/m <sup>3</sup> )	5 mg/m³ as Mn
IDLH	US IDLH (mg/m <sup>3</sup> )	500 mg/m³ as Mn
NIOSH	NIOSH REL (TWA) (mg/m <sup>3</sup> )	1 mg/m³ as Mn
NIOSH	NIOSH REL (ceiling) (mg/m <sup>3</sup> )	3 mg/m³ as Mn

#### 8.2. Appropriate engineering controls

Appropriate engineering controls

: Emergency eye wash fountains should be available in the immediate vicinity of any potential exposure.

#### 8.3. Individual protection measures/Personal protective equipment

#### Personal protective equipment:

Gloves. Safety glasses. Dust production: dust mask with filter type P3.



#### Materials for protective clothing:

GIVE EXCELLENT RESISTANCE: polyethylene. GIVE GOOD RESISTANCE: butyl rubber. PVC. polyethylene/ethylenevinylalcohol

#### Hand protection:

Gloves

#### Eye protection:

Face shield. In case of dust production: protective goggles

#### Skin and body protection:

Protective clothing. In case of dust production: head/neck protection. In case of dust production: dustproof clothing

#### **Respiratory protection:**

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Dust production: dust mask with filter type P3. High dust production: self-contained breathing apparatus

<b>SECTION 9: Physical and chemical</b>	properties
9.1. Information on basic physical and	chemical properties
Physical state	: Solid
Appearance	: Crystalline solid. Crystalline powder.
Color	: Dark violet-brown
Odor	: Odorless
Odor threshold	: No data available
рН	: 7.0 - 8.5 (1.6 %)
pH solution	: 1.6 %
Melting point	: >240 °C
Freezing point	: No data available
Boiling point	: Not applicable
Flash point	: Not applicable
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: No data available
Vapor pressure	: < 0.1 hPa (20 ℃)
Relative vapor density at 20 °C	: No data available
Relative density	: 2.7
Specific gravity / density	: 2700 kg/m <sup>3</sup>
Molecular mass	: 158.03 g/mol
Solubility	: Moderately soluble in water. Substance sinks in water. Soluble in ethanol. Soluble in methanol. Soluble in acetone. Soluble in acetic acid. Soluble in sulfuric acid. Soluble in pyridine. Water: 6.4 g/100ml
Log Pow	: -1.73 (Estimated value)
Auto-ignition temperature	: Not applicable
Decomposition temperature	: >240 °C
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosion limits	: No data available
Explosive properties	: No data available
Oxidizing properties	: May intensify fire; oxidiser.
9.2. Other information	
Minimum ignition energy	: Not applicable
SADT	: Not applicable
VOC content	: Not applicable
Other properties	: Opaque. Substance has basic reaction.

#### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

Decomposes on exposure to temperature rise: oxidation which increases fire hazard. Reacts with combustible materials: risk of spontaneous ignition. Violent to explosive reaction with (some) acids: release of toxic and corrosive gases/vapours. Reacts violently with many compounds e.g.: with organic material and with (strong) reducers. With (some) metals. With (increased) risk of fire/explosion.

#### 10.2. Chemical stability

Stable under normal conditions.

#### 10.3. Possibility of hazardous reactions

Reacts exothermically with combustible materials: (increased) risk of fire.

#### 10.4. Conditions to avoid

Incompatible materials.

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10.5. Incompatible materials			
Strong reducing agents. Organic compounds. combustible materials. metals.			
10.6. Hazardous decomposition products			
manganese.			
SECTION 11: Toxicological informati	on		
11.1. Information on toxicological effects			
Likely routes of exposure	: Skin and eye contact; Inhalation		
Acute toxicity	: Oral: Harmful if swallowed.		
Potassium Permanganate (7722-64-7)			
LD50 oral rat	1090 mg/kg (Rat)		
ATE US (oral)	1090 mg/kg body weight		
Skin corrosion/irritation	: Not classified		
	pH: 7.0 - 8.5 (1.6 %)		
Serious eye damage/irritation	: Not classified		
	pH: 7.0 - 8.5 (1.6 %)		
Respiratory or skin sensitization	: Not classified		
Germ cell mutagenicity	: Not classified		
Carcinogenicity	: Not classified		
Reproductive toxicity	: Not classified		
Specific target organ toxicity – single exposure	: Not classified		
Specific target organ toxicity – repeated exposure	: Not classified		
Aspiration hazard	: Not classified		
Symptoms/effects after inhalation	: AFTER INHALATION OF DUST: Dry/sore throat. Coughing. Irritation of the respiratory tract. Irritation of the nasal mucous membranes. EXPOSURE TO HIGH CONCENTRATIONS: Respiratory difficulties. FOLLOWING SYMPTOMS MAY APPEAR LATER: Risk of lung edema.		
Symptoms/effects after skin contact	: Tingling/irritation of the skin. May stain the skin. ON CONTINUOUS EXPOSURE/CONTACT: Caustic burns/corrosion of the skin.		
Symptoms/effects after eye contact	: Corrosion of the eye tissue. Inflammation/damage of the eye tissue. ON CONTINUOUS EXPOSURE/CONTACT: Permanent eye damage.		
Symptoms/effects after ingestion	: Nausea. Vomiting. Diarrhoea. Irritation of the gastric/intestinal mucosa. AFTER ABSORPTION OF LARGE QUANTITIES: Possible esophageal perforation. Shock. Slowing heart action. Low arterial pressure. Possible laryngeal spasm/oedema. Respiratory difficulties.		
Chronic symptoms	: ON CONTINUOUS/REPEATED EXPOSURE/CONTACT: Respiratory difficulties. Impairment of the nervous system. Movement disturbances. Coordination disorders. Myasthenia. Tremor. Paralysis. Cramps/uncontrolled muscular contractions. Impaired memory. Emotional instability.		
Chronic symptoms SECTION 12: Ecological information	the nervous system. Movement disturbances. Coordination disorders. Myasthenia. Tre Paralysis. Cramps/uncontrolled muscular contractions. Impaired memory. Emotional in		

SECTION 12: Ecological morma	lion
12.1. Toxicity	
Ecology - general	: Dangerous for the environment.
Ecology - air	: Not classified as dangerous for the ozone layer (Regulation (EC) No 1005/2009). TA-Luft Klasse 5.2.2/III.
Ecology - water	: Severe water pollutant (surface water). Ground water pollutant. Toxic to fishes. Very toxic to invertebrates (Daphnia).
Potassium Permanganate (7722-64-7)	
EC50 Daphnia 1	0.235 mg/l (EC50; 24 h)
LC50 fish 2	1.22 mg/l (LC50; 96 h)
Threshold limit algae 1	10 mg/l (EC50; 4 h)
12.2. Persistence and degradability	
Potassium Permanganate (7722-64-7)	
Persistence and degradability	Biodegradability: not applicable.
Biochemical oxygen demand (BOD)	Not applicable
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Potassium Permanganate (7722-64-7)		
Chemical oxygen demand (COD)	Not applicable	
ThOD	Not applicable	
12.3. Bioaccumulative potential		
Potassium Permanganate (7722-64-7)		
Log Pow	-1.73 (Estimated value)	
Bioaccumulative potential	Bioaccumulation: not applicable.	
12.4. Mobility in soil		
No additional information available		
12.5. Other adverse effects		
No additional information available		

<b>SECTION 13: Disposal consideration</b>	1S
13.1. Disposal methods	
Waste disposal recommendations	: Remove waste in accordance with local and/or national regulations. Hazardous waste shall not be mixed together with other waste. Different types of hazardous waste shall not be mixed together if this may entail a risk of pollution or create problems for the further management of the waste. Hazardous waste shall be managed responsibly. All entities that store, transport or handle hazardous waste shall take the necessary measures to prevent risks of pollution or damage to people or animals. Recycle/reuse. Immobilize the toxic or harmful components. Remove to an authorized dump (Class I).
Additional information	: LWCA (the Netherlands): KGA category 06. Hazardous waste according to Directive 2008/98/EC.
<b>SECTION 14: Transport information</b>	
Department of Transportation (DOT) In accordance with DOT	
Transport document description	: UN1490 Potassium permanganate, 5.1, II
UN-No.(DOT)	: UN1490
Proper Shipping Name (DOT)	: Potassium permanganate
Transport hazard class(es) (DOT)	: 5.1 - Class 5.1 - Oxidizer 49 CFR 173.128
Packing group (DOT)	: II - Medium Danger
Hazard labels (DOT)	: 5.1 - Oxidizer
	OXIDIZER 5.1
Dangerous for the environment	: Yes
Marine pollutant	: Yes
DOT Packaging Non Bulk (49 CFR 173.xxx)	: 212
DOT Packaging Bulk (49 CFR 173.xxx)	: 240

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DOT Special Provisions (49 CFR 172.102)	<ul> <li>IB8 - Authorized IBCs: Metal (11A, 11B, 11N, 21A, 21B, 21N, 31A, 31B and 31N); Rigid plastics (11H1, 11H2, 21H1, 21H2, 31H1 and 31H2); Composite (11HZ1, 11HZ2, 21HZ1, 21HZ2, 31HZ1 and 31HZ2); Fiberboard (11G); Wooden (11C, 11D and 11F); Flexible (13H1, 13H2, 13H3, 13H4, 13H5, 13L1, 13L2, 13L3, 13L4, 13M1 or 13M2).</li> <li>IP2 - When IBCs other than metal or rigid plastics IBCs are used, they must be offered for transportation in a closed freight container or a closed transport vehicle.</li> <li>IP4 - Flexible, fiberboard or wooden IBCs must be sift-proof and water-resistant or be fitted wi a sift-proof and water-resistant liner.</li> <li>T3 - 2.65 178.274(d)(2) Normal</li></ul>	ith
	instruction and special provisions shall apply. Filling limits must be in accordance with portable tank special provision TP3. Solids meeting the definition of an elevated temperature material must be transported in accordance with the applicable requirements of this subchapter.	е
DOT Packaging Exceptions (49 CFR 173.xxx)	152	
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27)	5 kg	
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)	25 kg	
DOT Vessel Stowage Location	D - The material must be stowed "on deck only" on a cargo vessel and on a passenger vesse carrying a number of passengers limited to not more than the larger of 25 passengers or one passenger per each 3 m of overall vessel length, but the material is prohibited on passenger vessels in which the limiting number of passengers is exceeded.	ŧ
DOT Vessel Stowage Other	56 - Stow "separated from" ammonium compounds,58 - Stow "separated from" cyanides	
Other information	No supplementary information available.	

SECTION 15: Regulatory information		
15.1. US Federal regulations		
Potassium Permanganate (7722-64-7)		
Listed on the United States TSCA (Toxic Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313		
RQ (Reportable quantity, section 304 of EPA's List of Lists)	100 lb	
SARA Section 311/312 Hazard Classes	Reactive hazard	

Substances Control Act (TSCA) inventory

Chemical(s) subject to the reporting requirements of Section 313 or Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372.

Potassium Permanganate	CAS-No. 7722-64-7	100%

15.2. International regulations		
CANADA		
Potassium Permanganate (7722-64-7)		
Listed on the Canadian DSL (Domestic Substances List)		
EU-Regulations		
No additional information available		
National regulations		
Potassium Permanganate (7722-64-7)		
Listed on the Canadian IDL (Ingredient Disclosure List)		
15.2. LIG State regulations		

#### 15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

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SECTION 16: Other information	
Revision date	: 02/13/2018
Full text of H-phrases: see section 16:	
H272	May intensify fire; oxidizer
H302	Harmful if swallowed
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects
NFPA health hazard	: 1 - Materials that, under emergency conditions, can cause significant irritation.
NFPA fire hazard	: 0 - Materials that will not burn under typical dire conditions, including intrinsically noncombustible materials such as concrete, stone, and sand.
NFPA reactivity	: 0 - Material that in themselves are normally stable, even under fire conditions.
NFPA specific hazard	: OX - Materials that posses oxidizing properties.
Hazard Rating	
Health	: 1 Slight Hazard - Irritation or minor reversible injury possible
Flammability	: 0 Minimal Hazard - Materials that will not burn
Physical	: 0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives.
Personal protection	: F
	F - Safety glasses, Gloves, Synthetic apron, Dust respirator

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