

according to UK REACH Regulation

Potassium Permanganate 0.2 mol/I

Revision date: 10.10.2023

Product code: 14409.xxxxx

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

1.1. Product identifier

Potassium Permanganate 0.2 mol/l

UFI:

R3W8-317C-9003-79SP

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

Use of the substance/mixture

Use as laboratory reagent. The product is intended for research, analysis and scientific education.

Uses advised against

Any non-intended use.

1.3. Details of the supplier of the safety data sheet

Company name:	MORPHISTO GmbH	
Street:	Schumannstr. 142/144	
Place:	D-63069 Offenbach	
Telephone:	+49 (0) 69 / 400 3019-60	Telefax: +49 (0) 69 / 400 3019-64
E-mail:	info@morphisto.de	
Contact person:	Morphisto GmbH	
E-mail:	gefahrstoffmanagement@morphisto.de	
Internet:	http://www.morphisto.de	
1.4. Emergency telephone	Poison Information Center Mainz, Germany	ν, Tel: +49(0)6131/19240

number:

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GB CLP Regulation

Skin Irrit. 2; H315 Eye Dam. 1; H318 Repr. 2; H361d Aquatic Acute 1; H400 Aquatic Chronic 2; H411

Full text of hazard statements: see SECTION 16.

Danger

2.2. Label elements

GB CLP Regulation

Hazard components for labelling

potassium permanganate

Signal word:

Pictograms:



Hazard statements

H315	Causes skin irritation.
H318	Causes serious eye damage.
H361d	Suspected of damaging the unborn child.
H410	Very toxic to aquatic life with long lasting effects.

Precautionary statements

Avoid release to the environment.

P273



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P280	Wear protective gloves/protective clothing/eye protection/face protection.						
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.						
P310	Immediately call a POISON CENTER/doctor.						
P337+P313	If eye irritation persists: Get medical advice/attention.						
P391	Collect spillage.						

Labelling of packages where the contents do not exceed 125 ml

Signal word: Pictograms:



Hazard statements H318-H361d

Precautionary statements P280-P305+P351+P338-P310

2.3. Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulating and toxic (PBT) or very persistent and very bioaccumulating (vPvB) at levels of 0.1% or higher. Ecological information: The substance/mixture does not contain any components that are considered to be hazardous according to REACH Article 57(f) or Commission Delegated Regulation (EU) 2017/2100 or Commission Delegated Regulation (EU) 2018/605 in amounts of 0.1% or more have endocrine disrupting properties. Toxicological information: The substance/mixture does not contain any components that are to be classified according to REACH Article 57(f) or Commission Delegated Regulation (EU) 2017/2100 or Commission Delegated Regulation (EU) 2018/605 in quantities of 0.1% or more have endocrine disrupting properties.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization aqueous solution

Hazardous components

CAS No	Chemical name				
	EC No				
	Classification (GB CLP Regulation)				
7722-64-7	potassium permanganate				
	231-760-3 025-002-00-9 01-2119480139-34				
	Ox. Sol. 2, Repr. 2, Acute Tox. 4, Skin Corr. 1C, Eye Dam. 1, STOT RE 2, Aquatic Acute 1, Aquatic Chronic 1; H272 H361d H302 H314 H318 H373 H400 H410				

Full text of H and EUH statements: see section 16.

Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
	Specific Conc. L	imits, M-factors and ATE	
7722-64-7	231-760-3	potassium permanganate	1 - < 5 %
	dermal: LD50 =	>2000 mg/kg; oral: LD50 = 750 mg/kg Aquatic Acute 1; H400: M=10	

Further Information

This product contains no substances of very high concern (SVHC) (>0,1%) which are included in the Candidate List according to Article 59 of REACH.



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SECTION 4: First aid measures

4.1. Description of first aid measures

General information

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

After inhalation

Provide fresh air. Medical treatment necessary. In case of accident by inhalation: remove casualty to fresh air and keep at rest. In case of respiratory tract irritation, consult a physician.

After contact with skin

After contact with skin, wash immediately with plenty of water and soap. Take off immediately all contaminated clothing and wash it before reuse. In case of skin irritation, seek medical treatment.

After contact with eyes

Rinse cautiously with water for several minutes. In case of troubles or persistent symptoms, consult an ophthalmologist.

After ingestion

Observe risk of aspiration if vomiting occurs. Rinse mouth thoroughly with water. Let water be drunken in little sips (dilution effect). Do NOT induce vomiting. In all cases of doubt, or when symptoms persist, seek medical advice.

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

No information available.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Co-ordinate fire-fighting measures to the fire surroundings. Carbon dioxide (CO2). Dry extinguishing powder. alcohol resistant foam. Atomized water.

Unsuitable extinguishing media

High power water jet.

5.2. Special hazards arising from the substance or mixture

Non-flammable. In case of fire may be liberated: Gas/vapours, harmful.

5.3. Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing. Full protection suit

Additional information

Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

Co-ordinate fire-fighting measures to the fire surroundings.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General advice

Provide adequate ventilation. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Use personal protection equipment.

6.2. Environmental precautions

Do not allow to enter into surface water or drains. Discharge into the environment must be avoided.

6.3. Methods and material for containment and cleaning up



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For cleaning up

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

Other information

Clean contaminated objects and areas thoroughly observing environmental regulations.

6.4. Reference to other sections

Safe handling: see section 7 Personal protection equipment: see section 8 Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray. Use extractor hood (laboratory). Wear suitable protective clothing. See section 8.

Advice on protection against fire and explosion

Usual measures for fire prevention.

Advice on general occupational hygiene

Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme. Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat, drink, smoke, sniff. Always close containers tightly after the removal of product.

Further information on handling

General protection and hygiene measures: See section 8.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed. Keep locked up. Store in a place accessible by authorized persons only. Provide adequate ventilation as well as local exhaustion at critical locations.

Hints on joint storage

Do not store together with: Explosives. Oxidizing solids. Oxidizing liquids. Radioactive substances. Infectious substances. Food and animal feedingstuff.

Further information on storage conditions

Keep the packing dry and well sealed to prevent contamination and absorbtion of humidity. Recommended storage temperature: 15-25 °C Protect against: frost. UV-radiation/sunlight. heat. Humidity

7.3. Specific end use(s)

See section 1.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m³	fibres/ml	Category	Origin
-	Manganese: its inorganic compounds (as Mn, inhalable fraction)	-	0.2		TWA (8 h)	WEL



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DNEL/DMEL values

CAS No	Substance			
DNEL type		Exposure route	Effect	Value
7722-64-7	potassium permanganate			
Worker DNEL,	long-term	inhalation	systemic	0,2 mg/m³
DNEC values		-		-

PNEC values

CAS No	Substance				
Environmental	compartment	Value			
7722-64-7	potassium permanganate				
Freshwater		0,00006 mg/l			
Micro-organism	s in sewage treatment plants (STP)	1,64 mg/l			

8.2. Exposure controls



Appropriate engineering controls

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray. Provide adequate ventilation. Use extractor hood (laboratory).

Individual protection measures, such as personal protective equipment

Eye/face protection

Suitable eye protection: goggles. Wear safety glasses; chemical goggles (if splashing is possible). EN 166

Hand protection

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. Wear suitable gloves.

Suitable material:

Butyl rubber. - Thickness of glove material: 0,5 mm

Breakthrough time >= 8 h

PVC (Polyvinyl chloride). - Thickness of glove material: 0,5 mm

Breakthrough time >= 8 h

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Check leak tightness/impermeability prior to use. In the case of wanting to use the gloves again, clean them before taking off and air them well.

Skin protection

Use of protective clothing. Suitable protective clothing: Lab apron.

Minimum standard for preventive measures while handling with working materials are specified in the TRGS 500 (D).

Respiratory protection

In case of inadequate ventilation wear respiratory protection. With correct and proper use, and under normal conditions, breathing protection is not required.

Respiratory protection necessary at:

-exceeding exposure limit values

-Insufficient ventilation. and aerosol or mist formation

Suitable respiratory protective equipment: particulates filter device (DIN EN 143). Type: P1-3



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The filter class must be suitable for the maximum contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product. If the concentration is exceeded, self-contained breathing apparatus must be used.

Environmental exposure controls

No special precautionary measures are necessary.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

	d chemical properties	
Physical state:	liquid violet	
Colour:		
Odour:	characteristic	~0 °C
Melting point/freezing point:	nd	~0 °C ~100 °C
Boiling point or initial boiling point a	na	~100 C
boiling range: Flammability:		not determined
Lower explosion limits:		not determined
-		
Upper explosion limits:		not determined
Flash point:		>100 °C
Auto-ignition temperature:		not determined
Decomposition temperature:		not determined
pH-Value (at 20 °C):		8-9
Viscosity / kinematic:		not determined
Water solubility:		miscible.
(at 20 °C)		
Solubility in other solvents		
not determined		
Partition coefficient n-octanol/water	:	not determined
Vapour pressure:		not determined
		1,02 g/cm ³
Density (at 20 °C):		, 0
Relative vapour density:		not determined
Relative vapour density: Particle characteristics:		, 0
Relative vapour density: Particle characteristics: <u>9.2. Other information</u>		not determined
Relative vapour density: Particle characteristics: <u>9.2. Other information</u> Information with regard to physica	al hazard classes	not determined
Relative vapour density: Particle characteristics: 9.2. Other information Information with regard to physica Explosive properties		not determined
Relative vapour density: Particle characteristics: 9.2. Other information Information with regard to physica Explosive properties The product is not: Explosive. n		not determined not applicable
Relative vapour density: Particle characteristics: 9.2. Other information Information with regard to physica Explosive properties The product is not: Explosive. n Sustaining combustion:		not determined
Relative vapour density: Particle characteristics: 9.2. Other information Information with regard to physica Explosive properties The product is not: Explosive. n Sustaining combustion: Self-ignition temperature		not determined not applicable
Relative vapour density: Particle characteristics: 9.2. Other information Information with regard to physica Explosive properties The product is not: Explosive. n Sustaining combustion: Self-ignition temperature Gas:		not determined not applicable
Relative vapour density: Particle characteristics: 9.2. Other information Information with regard to physica Explosive properties The product is not: Explosive. n Sustaining combustion: Self-ignition temperature Gas: Oxidizing properties		not determined not applicable
Relative vapour density: Particle characteristics: 9.2. Other information Information with regard to physica Explosive properties The product is not: Explosive. n Sustaining combustion: Self-ignition temperature Gas: Oxidizing properties none		not determined not applicable
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Relative vapour density: Particle characteristics: 9.2. Other information Information with regard to physica Explosive properties The product is not: Explosive. n Sustaining combustion: Self-ignition temperature Gas: Oxidizing properties none Other safety characteristics Evaporation rate:		not determined not applicable Not sustaining combustion not determined
Relative vapour density: Particle characteristics: 9.2. Other information Information with regard to physical Explosive properties The product is not: Explosive. n Sustaining combustion: Self-ignition temperature Gas: Oxidizing properties none Other safety characteristics Evaporation rate: Solvent separation test:		not determined not applicable Not sustaining combustion not determined not determined
Relative vapour density: Particle characteristics: 9.2. Other information Information with regard to physical Explosive properties The product is not: Explosive. n Sustaining combustion: Self-ignition temperature Gas: Oxidizing properties none Other safety characteristics Evaporation rate: Solvent separation test: Solvent content:		not determined not applicable Not sustaining combustion not determined not determined not determined not determined
Relative vapour density: Particle characteristics: 9.2. Other information Information with regard to physical Explosive properties The product is not: Explosive. In Sustaining combustion: Self-ignition temperature Gas: Oxidizing properties none Other safety characteristics Evaporation rate: Solvent separation test: Solvent content: Solid content:		not determined not applicable Not sustaining combustion not determined not determined not determined not determined not determined
Relative vapour density: Particle characteristics: 9.2. Other information Information with regard to physical Explosive properties The product is not: Explosive. In Sustaining combustion: Self-ignition temperature Gas: Oxidizing properties none Other safety characteristics Evaporation rate: Solvent separation test: Solvent content: Solid content: Sublimation point:		not determined not applicable Not sustaining combustion not determined not determined not determined not determined not determined not determined
Relative vapour density: Particle characteristics: 9.2. Other information Information with regard to physical Explosive properties The product is not: Explosive. In Sustaining combustion: Self-ignition temperature Gas: Oxidizing properties none Other safety characteristics Evaporation rate: Solvent separation test: Solvent content: Solid content: Sublimation point: Softening point:		not determined not applicable Not sustaining combustion not determined not determined not determined not determined not determined not determined not determined not determined
Relative vapour density: Particle characteristics: 9.2. Other information Information with regard to physical Explosive properties The product is not: Explosive. n Sustaining combustion: Self-ignition temperature Gas: Oxidizing properties none Other safety characteristics Evaporation rate: Solvent separation test: Solvent content: Solid content: Sublimation point: Softening point: Pour point:		not determined not applicable Not sustaining combustion not determined not determined not determined not determined not determined not determined not determined not determined not determined not determined
Relative vapour density: Particle characteristics: 9.2. Other information Information with regard to physical Explosive properties The product is not: Explosive. In Sustaining combustion: Self-ignition temperature Gas: Oxidizing properties none Other safety characteristics Evaporation rate: Solvent separation test: Solvent content: Solid content: Sublimation point: Softening point:		not determined not applicable Not sustaining combustion not determined not determined not determined not determined not determined not determined not determined not determined



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SECTION 10: Stability and reactivity

10.1. Reactivity

No information available.

10.2. Chemical stability

The product is chemically stable under recommended conditions of storage, use and temperature.

10.3. Possibility of hazardous reactions

Refer to chapter 10.5.

10.4. Conditions to avoid

Protect against: UV-radiation/sunlight. heat.

10.5. Incompatible materials

Materials to avoid: Reducing agents, strong.

10.6. Hazardous decomposition products

In case of fire may be liberated: Gas/vapours, harmful.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in GB CLP Regulation

Toxicocinetics, metabolism and distribution

Acute toxicity

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

ATEmix calculated

ATE (oral) 23734 mg/kg; ATE (dermal) > 2000 mg/kg; ATE (inhalation vapour) > 20 mg/l; ATE (inhalation dust/mist) > 5 mg/l

CAS No	Chemical name								
	Exposure route	Dose		Species	Source	Method			
7722-64-7	potassium permanganate								
	oral	LD50 mg/kg	750	Rat	RTECS				
	dermal	LD50 mg/kg	>2000						

Irritation and corrosivity

Causes skin irritation.

Causes serious eye damage.

Sensitising effects

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

Carcinogenic/mutagenic/toxic effects for reproduction

Suspected of damaging the unborn child. (potassium permanganate) Germ cell mutagenicity: Based on available data, the classification criteria are not met. Carcinogenicity: Based on available data, the classification criteria are not met.

STOT-single exposure

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

STOT-repeated exposure

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

Aspiration hazard

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



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11.2. Information on other hazards

Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to humans as no components meets the criteria.

Other information

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP]. Special hazards arising from the substance or mixture!

SECTION 12: Ecological information

12.1. Toxicity

Very toxic to aquatic life.

Toxic to aquatic life with long lasting effects.

CAS No	Chemical name									
	Aquatic toxicity	Dose		[h] [d]	Species	Source	Method			
7722-64-7	potassium permanganate	potassium permanganate								
	Acute fish toxicity	LC50 mg/l	0,47		Poecilia reticulata (Guppy)	ECHA				
	Acute algae toxicity	ErC50	0,8 mg/l	72 h		suppliers SDS.				
	Acute crustacea toxicity	EC50 mg/l	0,06		Daphnia magna (Big water flea)	ECHA				
	Acute bacteria toxicity	(EC50 mg/l)	164	3 h		suppliers SDS.				

12.2. Persistence and degradability

The methods for determining the biological degradability are not applicable to inorganic substances.

12.3. Bioaccumulative potential

No indication of bioaccumulation potential.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
7722-64-7	potassium permanganate	-1,73

12.4. Mobility in soil

The product has not been tested.

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to UK REACH.

12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

12.7. Other adverse effects

The product has not been tested.

Further information

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. Dispose of waste according to applicable legislation. Observe in addition any national regulations! Consult the local waste disposal expert about waste disposal. Non-contaminated packages may be recycled. According to (EWC) European Waste Catalogue, allocation of waste identity numbers/waste descriptions must



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be carried out in a specific way for every industry and process.

Control report for waste code/ waste marking according to (EWC) European Waste Catalogue:

List of Wastes Code - residues/unused products

160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; laboratory chemicals, consisting of or containing hazardous substances, including mixtures of laboratory chemicals; hazardous waste

List of Wastes Code - used product

160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; laboratory chemicals, consisting of or containing hazardous substances, including mixtures of laboratory chemicals; hazardous waste

List of Wastes Code - contaminated packaging

150110 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by hazardous substances; hazardous waste

Contaminated packaging

Hazardous waste according to Directive 2008/98/EC (waste framework directive). Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information

Land transport (ADR/RID)

Lanu transport (ADR/RID)	
14.1. UN number or ID number:	UN 3082
14.2. UN proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
	(potassium permanganate)
<u>14.3. Transport hazard class(es):</u>	9
14.4. Packing group:	III
Hazard label:	9
Classification code:	M6
Special Provisions:	274 335 375 601
Limited quantity:	5 L
Excepted quantity:	E1
Transport category:	3
Hazard No:	90
Tunnel restriction code:	-
Inland waterways transport (ADN)	
14.1. UN number or ID number:	UN 3082
14.2. UN proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
	(potassium permanganate)
14.3. Transport hazard class(es):	9
14.4. Packing group:	III
Hazard label:	9
Classification code:	M6
Special Provisions:	274 335 375 601
Limited quantity:	5 L
Excepted quantity:	E1
······································	



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Marine transport (IMDG) UN 3082 14.1. UN number or ID number: UN 3082 14.2. UN proper shipping name: UN 3082 14.3. Transport hazard class(es); 9 14.4. Packing group: 9 Hazard label: 9 Special Provisions: 274 335 969 Limited quantity: E1 EmS: F.A. S.F Air transport (ICAO-TI/IATA-DGR) UN 3082 14.1. UN number or ID number: 14.1. UN number or ID number: 14.2. UN proper shipping name: UN 3082 14.3. Transport (ICAO-TI/IATA-DGR) UN 3082 14.1. UN number or ID number: UN 3082 14.3. Transport flocating group: HI Hazard label: 9 9 III 9 III 9 III 9 III 9 IIII 9 IIII 9 IIII 9 IIII 9 IIII 9 IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	Potassium Permanganate 0.2 mol/l Product code: 14409.xxxxx Page 10 of 13				
14.1. UN number or iD number: UN 3082 14.2. UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Potassium permanganate.) 14.3. Transport hazard class(es): 9 14.4. Packing group: 9 Hazard label: 9 Special Provisions: 274 335 969 Limited quantity: E1 Erns: FA, S-F Air transport (ICAO-TI/IATA-DGR) 14.1. UN number or ID number: 14.3. Transport hazard class(es): 14.3. Transport hazard class(es): 14.3. Transport hazard class(es): 9 14.3. Transport hazard class(es): 9 14.3. Transport hazard class(es): 14.3. Transport hazard class(es): 14.3. Transport hazard class(es): 9 14.4. Packing group: 11 Hazard label: 9 Special Provisions: A97 A158 A197 A215 Limited quantity: Passenger: IATA-max. quantity - Passenger: 964 IATA-max. quantity - Cargo: 450 L IATA-max. q					
14.2. UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Potassium permanganate.) 14.3. Transport hazard class(es): 9 14.4. Packing group: III Hazard label: 9 Special Provisions: 274 335 969 Limited quantity: E1 Excepted quantity: F1 Ems: F-A, S-F Air transport (ICAO-TI/IATA-DGR) UN 3082 14.1. UN number or ID number: UN 3082 14.3. Transport hazard class(es): 9 14.4. Packing group: HI Hazard label: 9 14.3. Transport hazard class(es): 10 14.4. Packing group: UN 3082 Hazard label: 9 9 III 9 III 9 III 9 III 9 III 14.3. Transport hazard class(es): 9 14.4. Packing group: III Hazard label: 9 9 III 14.3. Transport hazard class(es): 9 14.4. Packing instructions - Cargo: 30 kg G <t< th=""><th></th></t<>					
14.3. Transport hazard class(es): 9 14.4. Packing group: 9 Hazard label: 9 Special Provisions: 274 335 969 Limited quantity: E1 Erxcepted quantity: F1 Hazard label: 9 14.1. UN number or ID number: UN 3082 14.2. Packing group: UN 3082 14.3. Transport (ICAO-TI/IATA-DGR) UN 3082 14.1. UN number or ID number: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Potassium permanganate) 14.3. Transport hazard class(es): 11 14.4. Packing group: 11 Hazard label: 9 9 9 14.3. Transport hazard class(es): 11 14.4. Packing instructions - Cargo: A97 A158 A197 A215 11 9 11 9 11 9 12 14.4. Packing instructions - Passenger: 964 14.7. Apacking instructions - Cargo: 964 14.7. Apacking instructions - Cargo: 450 L 14.5. Environmental hazards 145 Environmental hazards 145 Environmental					
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Refer to section 6-8					
not relevant					
SECTION 15: Regulatory information					
15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture					

EU regulatory information Restrictions on use (REACH, annex XVII): Entry 3, Entry 75 2010/75/EU (VOC): 2004/42/EC (VOC):

No information available. No information available.



according to UK REACH Regulation

Potassium Permanganate 0.2 mol/l Product code: 14409.xxxx Page 11 of 1 Information according to 2012/18/EU (SEVESO III): E1 Hazardous to the Aquatic Environment (SEVESO III): Product code: 14409.xxxx Page 11 of 1 Additional information E1 Hazardous to the Aquatic Environment (SEVESO III): Page 11 of 1 Additional information The mixture is classified as hazardous according to regulation (EC) No 1272/2008 (ELP). National regulatory information Observe restrictions to employment for juveniles according to the juvenile work protection guideline (94/33/EC). Observe employment restrictions under the Maternity Protection Directive (92/85/EC) for expectant or nursing mothers. Tort the following substances of this mixture a chemical safety assessment has been carried out: potassum pormanganate Page 11 of 1 SECTION 15: Other information Experimental safety assessment has been carried out: potassum pormanganate Page 12 of 20 (SE		according to UK REACH Regulation			
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15.2. Chemical safety assessment For the following substances of this mixture a chemical safety assessment has been carried out: potassium permanganate SEECTION 16: Other Information Changes This data sheet contains changes from the previous version in section(s): 1,2,3,4,5,6,7,9,11,12,13,14,15,16. Rev. 20, 12.02,2023, Individual safety data sheet based on 11152_collect Rev. 21, 10.10,2023; general adjustment(s) Abbreviations and acronyms ADR: Accord européen sur le transport des marchandises dangereuses par Route Ave: Veordnung Uber Aniagen zum Umgang mit wassergefahrdenden Stoffen AGW: Veordnung Uber Aniagen azum Umgang mit wassergefahrdenden Stoffen AGW: Veordnung Uber Aniagen and Packaging of substances and mixtures DNEL: Derived No Effect Level d: days) Cherical Not Effect Level d: days) ELINCES: European INventory of Existing Commercial chemical Substances ELINCES: European INventory of Existing Commercial chemical Substances ELINCE: Seruopean INventory of Existing Commercial chemical Substances ELINCE: European INventory of Existing Commercial chemical Substances ELINCE: Europaen INv		work protection guideline' (94/33/EC). Observe employ under the Maternity Protection Directive (92/85/EEC) for	ment restrictions		
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IATA: International Air Transport Association IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA) ICAO: International Civil Aviation Organization ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO) GHS: Globally Harmonized System of Classification and Labelling of Chemicals GefStoffV: Gefahrstoffverordnung (Ordinance on Hazardous Substances, Germany) h: hour LOAEL: Lowest observed adverse effect level LOAEC: Lowest observed adverse effect level LOAEC: Lowest observed adverse effect concentration LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent NOAEL: No observed adverse effect level NOAEC: No observed adverse effect level NOAEC: No observed adverse effect level NLP: No-Longer Polymers N/A: not applicable OECD: Organisation for Economic Co-operation and Development PNEC: predicted no effect concentration PBT: Persistent bioaccumulative toxic					
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Revision No: 2,1 - Replaces version: 2,0 GB - en Print date: 10.10.2023	-				
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according to UK REACH Regulation

Potassium Permanganate 0.2 mol/l

Revision date: 10.10.2023

Product code: 14409.xxxx

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RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail) REACH: Registration, Evaluation, Authorisation of Chemicals SVHC: substance of very high concern TRGS Technische Regeln fuer Gefahrstoffe UN: United Nations VOC: Volatile Organic Compounds VwVwS: Verwaltungsvorschrift wassergefaehrdender Stoffe WGK: Wassergefaehrdungsklasse CLP: Classification, labelling and Packaging REACH: Registration. Evaluation and Authorization of Chemicals GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals UN: United Nations CAS: Chemical Abstracts Service DNFL: Derived No Effect Level DMFL: Derived Minimal Effect Level PNEC: Predicted No Effect Concentration ATE: Acute toxicity estimate LL50: Lethal loading, 50% EL50: Effect loading, 50% EC50: Effective Concentration 50% ErC50: Effective Concentration 50%, growth rate NOEC: No Observed Effect Concentration BCF: Bio-concentration factor PBT: persistent, bioaccumulative, toxic vPvB: very persistent, very bioaccumulative ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road) RID: Regulations concerning the international carriage of dangerous goods by rail ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures) EmS: Emergency Schedules MFAG: Medical First Aid Guide MARPOL: International Convention for the Prevention of Marine Pollution from Ships IBC: Intermediate Bulk Container For abbreviations and acronyms, see: ECHA Guidance on information requirements and chemical safety assessment, chapter R.20 (Table of terms and abbreviations). Classification for mixtures and used evaluation method according to GB CLP Regulation Classification Classification procedure Skin Irrit. 2; H315 Calculation method Eye Dam. 1; H318 Calculation method Repr. 2; H361d Calculation method Aquatic Acute 1; H400 Calculation method Aquatic Chronic 2; H411 Calculation method Relevant H and EUH statements (number and full text) H272 May intensify fire; oxidiser. H302 Harmful if swallowed. H314 Causes severe skin burns and eye damage. H315 Causes skin irritation.

H318 Causes skin infation. H318 Causes serious eye damage.

- H361d Suspected of damaging the unborn child.
- H373 May cause damage to organs through prolonged or repeated exposure.



according to UK REACH Regulation

Potassium Permanganate 0.2 mol/l

Revision date: 10.10.2023

Product code: 14409.xxxxx

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H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.

Further Information

The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations. Classification according to Regulation (EC) No 1272/2008 [CLP] - Classification procedure:

Health hazards: Calculation method.

Environmental hazards: Calculation method.

Physical hazards: On basis of test data and / or calculated and / or estimated.

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)