Sulphide No.2 Photometer

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

1.1 - Product identifier

Trade name/designation	Sulphide No.2 Photometer
Chemical name	
Product-type	Mixture
Product code	TbsPSULFD2

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

Relevant identified uses	- Reagent for water analysis
Uses advised against	- Other

1.3 - Details of the supplier of the safety data sheet

Water-I.D. GmbH
Daimlerstr. 20
76344 Eggenstein Germany
Telephone : +49 (0) 721 - 78 20 29 - 0 Fax +49 (0) 721 - 78 20 29 - 11
Website www.water-id.com
EHS / Compliance: lab@water-id.com

1.4 - Emergency telephone number

- Poison Control Center Munich
Tel: +49 (0) 89 / 19 24 0
Germany
24 hour service
Languages: German, English
please also call from: United Kingdom

SECTION 2: Hazards identification

2.1 - Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [CLP]

Eye Dam. 1	Serious eye damage, Category 1

2.2 - Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Contains: sodium hydrogensulphate (CAS No.: 7681-38-1)

Signal word : Danger

Hazard pictograms

Hazard statements

H318	Causes serious eye damage

Precautionary statements

P280	Wear protective gloves, protective clothing, eye protection.

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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, a doctor.
EUH-phrases	: None

2.3 - Other hazards

SECTION 3: Composition / information on ingredients

3.1 - Substances

Not applicable

3.2 - Mixtures

- This mixture contains the following substances of very high concern (SVHC) which are included in the Candidate List according to Article 59 of REACH:

- chromates, e.g. potassium chromate, potassium or sodium dichromate

Chemical name	No	%	Class	Spec. concentrations
sodium hydrogensulphate	CAS No. : 7681-38-1 Index No. : 016-046-00-X EC No. : 231-665-7 REACH No. : 01-2119552465-36-XXXX	70 - 80	Eye Dam. 1 - H318	Not applicable
adipic acid	CAS No. : 124-04-9 Index No. : 607-144-00-9 EC No. : 204-673-3 REACH No. : 01-2119457561-38-XXXX	10 - 20	Eye Irrit. 2 - H319	Not applicable
potassium chromate	CAS No. : 7789-00-6 Index No. : 024-006-00-8 EC No. : 232-140-5 REACH No. : 01-2119543478-30-XXXX	< 0,1	Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410 Carc. 1B - H350 Eye Irrit. 2 - H319 Muta. 1B - H340 Skin Irrit. 2 - H315 Skin Sens. 1 - H317 STOT SE 3 (H335) - H335	Skin Sens. 1 - H317 : 0,5>=%<=100
potassium dichromate	CAS No. : 7778-50-9 Index No. : 024-002-00-6 EC No. : 231-906-6 REACH No. : 01-2119454792-32-XXXX	< 0,1	Acute Tox. 2 Inhalation - H330 Acute Tox. 3 Oral - H301 Acute Tox. 4 Dermal - H312 Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410 Carc. 1B - H350 Muta. 1B - H340 Ox. Sol. 2 - H272 Repr. 1B - H360 Resp. Sens. 1 - H334 Skin Corr. 1B - H314 Skin Sens. 1 - H317 STOT RE 1 - H372	STOT SE 3 (H335) - H335 : 5>=%<=100

SECTION 4: First aid measures

4.1 - Description of first aid measures

Following inhalation	- Provide fresh air. - When in doubt or if symptoms are observed, get medical advice.
Following skin contact	- Wash immediately with: Water

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	- When in doubt or if symptoms are observed, get medical advice.
After eye contact	- In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.
After ingestion	- Rinse mouth thoroughly with water. - Do NOT induce vomiting.

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

Symptoms and effects - Following inhalation	- No information available.
Symptoms and effects - Following skin contact	- No information available.
Symptoms and effects - After eye contact	- Serious eye damage/eye irritation
Symptoms and effects - After ingestion	- 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	- ABC-powder - Carbon dioxide (CO_2) - Foam - Extinguishing powder
Unsuitable extinguishing media	- Full water jet

5.2 - Special hazards arising from the substance or mixture

Special hazards arising from the substance or mixture	- No information available.
Hazardous decomposition products	- Carbon dioxide (CO_2) - Carbon monoxide - metallic oxides containing heavy metals - Nitrogen oxides (NO_x)

5.3 - Advice for firefighters

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

SECTION 6: Accidental release measures

6.1 - Personal precautions, protective equipment and emergency procedures

For non-emergency personnel	- Use personal protection equipment.
For emergency responders	- No information available.

6.2 - Environmental precautions

- No information available.

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6.3 - Methods and material for containment and cleaning up

Methods and material for containment	- No information available.
Methods and material for cleaning up	- Take up mechanically. - Wash with plenty of water.
Inappropriate techniques	- No information available.

6.4 - Reference to other sections

- Disposal: see section 13
- Personal protection equipment: see section 8

SECTION 7: Handling and storage

7.1 - Precautions for safe handling

Recommendation	- Avoid: Eye contact - Avoid: Generation/formation of dust - It is recommended to design all work processes always so that the following is excluded: Eye contact
Advices on general occupational hygiene	- No information available.

7.2 - Conditions for safe storage, including any incompatibilities

- No information available.

7.3 - Specific end use(s)

- Reagent for water analysis

SECTION 8: Exposure controls/personal protection

8.1 - Control parameters

8.2 - Exposure controls

Appropriate engineering controls	- No information available.
Individual protection measures, such as personal protective equipment	- Suitable protective clothing: lab coat - Suitable eye protection:Eye glasses with side protection - When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits.

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- Suitable material: NBR (Nitrile rubber)

SECTION 9: Physical and chemical properties

9.1 - Information on basic physical and chemical properties

Physical state	Solid	Appearance	Tablets
Colour	pigmented	Odour	odourless

Odour threshold	No data available
pH	1 10,5 g/l
Melting point	No data available
Freezing point	No data available
Boiling point	No data available
Flash point	No data available
Evaporation rate	No data available
flammability	No data available
Lower explosion limit	No data available
Upper explosion limit	No data available
Vapour pressure	No data available
Vapour density	No data available
Relative density	No data available
Density	No data available
Solubility (Water)	No data available
Solubility (Ethanol)	No data available
Solubility (Acetone)	No data available
Solubility (Organic solvents)	No data available
Log KOC	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Kinematic viscosity	No data available
Dynamic viscosity	No data available

9.2 - Other information

VOC content	No data available
Minimum ignition energy	No data available
Conductivity	No data available

SECTION 10: Stability and reactivity

10.1 - Reactivity

- This material is considered to be non-reactive under normal use conditions.

10.2 - Chemical stability

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

10.3 - Possibility of hazardous reactions

- No hazardous reaction when handled and stored according to provisions.

10.4 - Conditions to avoid

- No information available.

10.5 - Incompatible materials

- Alkali (lye), concentrated

10.6 - Hazardous decomposition products

- Does not decompose when used for intended uses.

SECTION 11: Toxicological information

11.1 - Information on toxicological effects

Acute toxicity - Not classified

Toxicity : Mixture

LD50 oral (rat)	No data available
LD50 dermal (rat)	No data available
LD50 dermal (rabbit)	No data available
LC50 inhalation (rat)	No data available
LC50 inhalation dusts and mists (rat)	No data available
LC50 inhalation vapours (rat)	No data available

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

Toxicity : Substances

potassium dichromate (7778-50-9)	
LD50 oral (rat)	67 mg/kg < V < 168 mg/kg ECHA
LD50 dermal (rabbit)	14 mg/kg
LC50 inhalation dusts and mists (rat)	83 mg/l < V < 99 mg/l ECHA 4h

sodium hydrogensulphate (7681-38-1)	
LD50 oral (rat)	2490 mg/kg

adipic acid (124-04-9)	
LD50 oral (rat)	5560 mg/kg

potassium chromate (7789-00-6)	
LD50 oral (rat)	168 mg/kg ECHA
LD50 dermal (rabbit)	2000 mg/kg
LC50 inhalation dusts and mists (rat)	83 mg/l < V < 99 mg/l ECHA 4h

Skin corrosion/irritation - Not classified

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Serious eye damage/eye irritation	- Serious eye damage, Category 1 - Causes serious eye damage
	- Risk of serious damage to eyes. - Causes serious eye irritation.
Respiratory or skin sensitisation	- Not classified
Germ cell mutagenicity	- Not classified
Carcinogenicity	- Not classified
Reproductive toxicity	- Not classified
STOT-single exposure	- Not classified
STOT-repeated exposure	- Not classified
Aspiration hazard	- Not classified

SECTION 12: Ecological information

12.1 - Toxicity

Toxicity : Mixture

EC50 48 hr crustacea	No data available
LC50 96 hr fish	No data available
ErC50 algae	No data available
ErC50 other aquatic plants	No data available
NOEC chronic fish	No data available
NOEC chronic crustacea	No data available
NOEC chronic algae	No data available
NOEC chronic other aquatic plants	No data available

Toxicity : Substances

potassium dichromate (7778-50-9)	
EC50 48 hr crustacea	0,035 mg/l Daphnia magna
LC50 96 hr fish	0,131 mg/l Lepomis macrochirus
ErC50 algae	0,31 mg/l Pseudokrichneriella subcapitata 72h
NOEC chronic fish	6 mg/l Pimephales promelas 7d
NOEC chronic crustacea	0,016 mg/l < V < 0,064 mg/l Daphnia magna 7d

sodium hydrogensulphate (7681-38-1)	
EC50 48 hr crustacea	1766 mg/l
LC50 96 hr fish	7960 mg/l
NOEC chronic crustacea	1109 mg/l

adipic acid (124-04-9)	
EC50 48 hr crustacea	46 mg/l
ErC50 other aquatic plants	59 mg/l
NOEC chronic crustacea	6,3 mg/l

potassium chromate (7789-00-6)	
EC50 48 hr crustacea	15 mg/l Daphnia magna
LC50 96 hr fish	40 mg/l Pimephales promelas
ErC50 algae	0,26 mg/l 72h / Nitzschia sp.

- The substance/mixture does not fullfill the criteria of the acute aquatic toxicity according to Regulation (EC) No 1272/2008 [CLP], Annex I.

12.2 - Persistence and degradability

Biochemical oxygen demand (BOD)	No data available
Chemical oyxgen demand (COD)	No data available
% of biodegradation in 28 days	No data available

- No information available.

12.3 - Bioaccumulative potential

Bioconcentration factor (BCF)	No data available
Log KOC	No data available

- No indication of bioaccumulation potential.

12.4 - Mobility in soil

- No information available.

12.5 - Results of PBT and vPvB assessment

12.6 - Other adverse effects

- No information available.

SECTION 13: Disposal considerations

13.1 - Waste treatment methods

Waste treatment methods	- Dispose of waste according to applicable legislation.
Sewage disposal	- No information available.
Special precautions for waste treatment	- No information available.
Community or national or regional provisions	- Dispose according to legislation.

SECTION 14: Transport information

14.1 - UN number

Not applicable

14.2 - UN proper shipping name

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14.3 - Transport hazard class(es)

14.4 - Packing group

14.5 - Environmental hazards

14.6 - Special precautions for user

14.7 - Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

SECTION 15: Regulatory information

15.1 - Safety, health and environmental regulations/legislation specific for the substance or mixture

Substances REACH candidates	potassium dichromate (Index No.: 024-002-00-6 - EC No.: 231-906-6 - CAS No.: 7778-50-9) potassium chromate (Index No.: 024-006-00-8 - EC No.: 232-140-5 - CAS No.: 7789-00-6)
Substances Annex XIV	potassium dichromate (Index No.: 024-002-00-6 - EC No.: 231-906-6 - CAS No.: 7778-50-9) potassium chromate (Index No.: 024-006-00-8 - EC No.: 232-140-5 - CAS No.: 7789-00-6)
Substances Annex XVII	None
VOC content	No data available

15.2 - Chemical Safety Assessment

Chemical safety assessment carried out for the product - No information available.

SECTION 16: Other information

SDS versions

Version	Issue date	Description of the amendments
1	21.12.2018	MSDS creation

Abbreviations and acronyms - See overview table at www.euphrac.eu

Texts of the regulatory sentences

Acute Tox. 2 Inhalation	Acute toxicity (inhalative) - Category 2
Acute Tox. 3 Oral	Acute toxicity (oral) - Category 3
Acute Tox. 4 Dermal	Acute toxicity (dermal) - Category 4
Aquatic Acute 1	Hazardous to the aquatic environment - Aquatic Acute 1
Aquatic Chronic 1	Hazardous to the aquatic environment - Aquatic Chronic 1
Carc. 1B	Carcinogenicity - Category 1B
Eye Dam. 1	Serious eye damage, Category 1
Eye Irrit. 2	Eye irritation - Category 2
H272	May intensify fire; oxidiser
H301	Toxic if swallowed
H312	Harmful in contact with skin
H314	Causes severe skin burns and eye damage

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H315	Causes skin irritation
H317	May cause an allergic skin reaction
H318	Causes serious eye damage
H319	Causes serious eye irritation
H330	Fatal if inhaled
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled
H335	May cause respiratory irritation
H340	May cause genetic defects - state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard
H350	May cause cancer - state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard
H350i	May cause cancer by inhalation
H360F	May damage fertility
H372	Causes damage to organs or state all organs affected, if known through prolonged or repeated exposure - state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard
H410	Very toxic to aquatic life with long lasting effects
Muta. 1B	Germ cell mutagenicity - Category 1B
Ox. Sol. 2	Oxidising solids - Category 2
Repr. 1B	Reproductive toxicity - Category 1B
Resp. Sens. 1	Sensitisation — Respiratory, category 1
Skin Corr. 1B	Skin corrosion, Category 1B
Skin Irrit. 2	Irritation, Category 2
Skin Sens. 1	Skin sensitization - Category 1
STOT RE 1	STOT-repeated exposure - Category 1
STOT SE 3 (H335)	STOT-single exposure - Category 3 (H335)

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.

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