Chloride No.2 Photometer

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

1.1 - Product identifier

Trade name/designation Chloride No.2 Photometer
Chemical name
Product-type Mixture
Product code TbsPCRD2

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

Relevant identified uses - Reagent for water analysis

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]

Skin Irrit. 2	Irritation, Category 2
Eye Irrit. 2	Eye irritation - Category 2
Resp. Sens. 1	Sensitisation — Respiratory, category 1
Skin Sens. 1	Skin sensitization - Category 1
Aquatic Acute 1	Hazardous to the aquatic environment - Aquatic Acute 1
Aquatic Chronic 1	Hazardous to the aquatic environment - Aquatic Chronic 1

2.2 - Label elements

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

Contains: dipotassium peroxodisulphate, potassium persulphate (CAS No.: 7727-21-1)

Signal word : Danger
Hazard pictograms

Hazard statements

H315	Causes skin irritation
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects

Precautionary statements

P261	Avoid breathing dust.
P264	Wash hands thoroughly after handling.
P272	Contaminated work clothing should not be allowed out of the workplace.
P273	Avoid release to the environment.
P280	Wear protective gloves, protective clothing, eye protection.
P284	[In case of inadequate ventilation] wear respiratory protection.
P302+P352	IF ON SKIN: Wash with plenty of water and soap.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P332+P313	If skin irritation occurs: Get medical advice/attention.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P337+P313	If eye irritation persists: Get medical advice/attention.
P342+P311	If experiencing respiratory symptoms: Call a POISON CENTER/doctor/.?.
P362+P364	Take off contaminated clothing and wash it before reuse.
P391	Collect spillage.

EUH-phrases

EUH208	Contains dipotassium peroxodisulphate, potassium persulphate (7727-21-1) . May produce an allergic reaction

2.3 - Other hazards

SECTION 3: Composition / information on ingredients

3.1 - Substances

Not applicable

3.2 - Mixtures

Chemical name	No	%	Class	Spec. concentrations
dipotassium peroxodisulphate, potassium persulphate	CAS No. : 7727-21-1 Index No. : 016-061-00-1 EC No. : 231-781-8 REACH No. : 01-2119495676-19-XXXX	1 - 10	Acute Tox. 4 Oral - H302 Eye Irrit. 2 - H319 Ox. Sol. 3 - H272 Resp. Sens. 1 - H334 Skin Irrit. 2 - H315 Skin Sens. 1 - H317 STOT SE 3 (H335) - H335	Not applicable
silver nitrate	CAS No. : 7761-88-8 Index No. : 047-001-00-2 EC No. : 231-853-9 REACH No. : 01-2119513705-43-XXXX	1 - 5	Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410 Ox. Sol. 2 - H272 Skin Corr. 1B - H314	Not applicable

Chloride No.2 Photometer

SECTION 4: First aid measures

4.1 - Description of first aid measures

Following inhalation	- After inhaling vapours, first symptoms of poisoning may develop hours later, so always consult a doctor. - Provide fresh air. - When in doubt or if symptoms are observed, get medical advice. - Symptoms may develop several hours following exposure; medical observation therefore necessary for at least 48 hours.
Following skin contact	- After contact with skin, wash immediately with plenty of water and soap. - In case of skin irritation, consult a physician. - In case of skin reactions, consult a physician.
After eye contact	- Rinse immediately carefully and thoroughly with eye-bath or water. - In case of eye irritation 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	- Symptoms can occur only after several hours. - Effects Allergic reactions
Symptoms and effects - Following skin contact	- Causes skin irritation.
Symptoms and effects - After eye contact	- Causes 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 (CO2) - 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	- Nitrogen oxides (NOx) - Sulphur oxides - metallic oxides containing heavy metals

5.3 - Advice for firefighters

- Remove product from area of fire.
- Wear a self-contained breathing apparatus and chemical protective clothing.

SECTION 6: Accidental release measures

6.1 - Personal precautions, protective equipment and emergency procedures

For non-emergency personnel	- Use personal protection equipment. - Remove persons to safety. - Wear breathing apparatus if exposed to vapours/dusts/aerosols.
For emergency responders	- Wear breathing apparatus if exposed to vapours/dusts/aerosols.

6.2 - Environmental precautions

- No information available.

6.3 - Methods and material for containment and cleaning up

Methods and material for containment	- No information available. - Soak up inert absorbent and dispose as waste requiring special attention.
Methods and material for cleaning up	- Take up mechanically, placing in appropriate containers for disposal. - Clear contaminated areas thoroughly. - Take up dust-free and set down dust-free. - Ventilate affected area.
Inappropriate techniques	- No information available.

6.4 - Reference to other sections

- 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 - Avoid: Skin contact - It is recommended to design all work processes always so that the following is excluded: Skin contact - After use replace the closing cap immediately. - Vapours/aerosols must be exhausted directly at the point of origin. - All work processes must always be designed so that the following is excluded: Inhalation - See section 8.

Chloride No.2 Photometer

Advices on general occupational hygiene	- Work in well-ventilated zones or use proper respiratory protection.

7.2 - Conditions for safe storage, including any incompatibilities

- Keep container tightly closed in a cool, well-ventilated place.

7.3 - Specific end use(s)

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 - Suitable respiratory protection apparatus:Particle filter device (DIN EN 143) - When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. - Suitable material: NBR (Nitrile rubber) - Barrier creams are not substitutes for body protection.




SECTION 9: Physical and chemical properties

9.1 - Information on basic physical and chemical properties

Physical state	Solid	Appearance	Tablets
Colour	White	Odour	odourless

Odour threshold	No data available
pH	9,6 4,8 g/l
Melting point	No data available

Chloride No.2 Photometer

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

- No information available.

10.6 - Hazardous decomposition products

- Does not decompose when used for intended uses.

SECTION 11: Toxicological information

Chloride No.2 Photometer

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

silver nitrate (7761-88-8)	
LD50 oral (rat)	1173 mg/kg

dipotassium peroxodisulphate, potassium persulphate (7727-21-1)	
LD50 oral (rat)	802 mg/kg RTECS

Skin corrosion/irritation
- Irritation, Category 2 - Causes skin irritation
- Irritating to skin.

Serious eye damage/eye irritation
- Eye irritation - Category 2 - Causes serious eye irritation
- Irritating to eyes.

Respiratory or skin sensitisation
- Sensitisation — Respiratory, category 1 - May cause allergy or asthma symptoms or breathing difficulties if inhaled
- Skin sensitization - Category 1 - May cause an allergic skin reaction
- May cause sensitization by inhalation.
- May cause sensitization by skin contact.
- May cause an allergic skin reaction.

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

silver nitrate (7761-88-8)	
EC50 48 hr crustacea	0,0067 mg/l
LC50 96 hr fish	0,0069 mg/l < V < 0,0082 mg/l
NOEC chronic fish	0,00037 mg/l

dipotassium peroxodisulphate, potassium persulphate (7727-21-1)	
EC50 48 hr crustacea	357 mg/l Daphnia magna
LC50 96 hr fish	100 mg/l Poecillia reticulata

- Very toxic to aquatic life.
- Very toxic to aquatic life with long lasting effects.

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

- Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste.
- Handle contaminated packages in the same way as the substance itself.

Sewage disposal	- Do not empty into drains.
Special precautions for waste treatment	- Waste requires special monitoring. - Collect the waste separately. - Send to a hazardous waste incinerator facility under observation of official regulations. - Waste requires monitoring. - The waste is to be kept separate from other types of waste until its disposal.
Community or national or regional provisions	- Dispose according to legislation.

SECTION 14: Transport information

14.1 - UN number

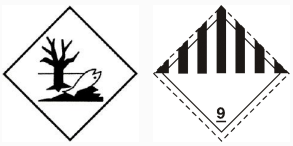
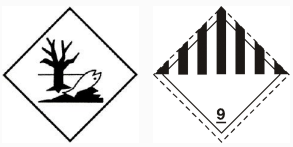
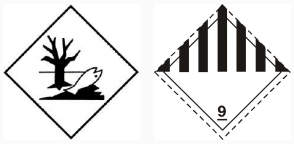
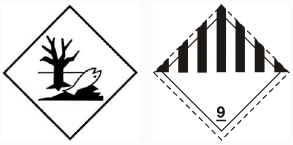
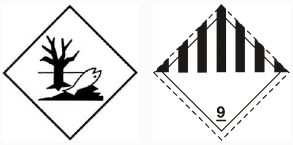
UN number (ADR)	:	UN3077
UN number (RID)	:	UN3077
UN number (ADN)	:	UN3077
UN number (IMDG)	:	UN3077
UN number (IATA)	:	UN3077

14.2 - UN proper shipping name

UN proper shipping name (ADR)	:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (silver nitrate)
UN proper shipping name (RID)	:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (silver nitrate)
UN proper shipping name (ADN)	:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (silver nitrate)
UN proper shipping name (IMDG)	:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (silver nitrate)
UN proper shipping name (IATA)	:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (silver nitrate)

14.3 - Transport hazard class(es)

Chloride No.2 Photometer

ADR Transport hazard class(es)	:	9
ADR Classification code:	:	M7
Pictograms		
Transport hazard class(es) (RID)	:	9
Pictograms		
Transport hazard class(es) (ADN)	:	9
Pictograms		
Transport hazard class(es) (IMDG)	:	9
Pictograms		
Transport hazard class(es) (IATA)	:	9
Pictograms		

14.4 - Packing group

Packing group	:	III
Packing group (RID)	:	III
Packing group (ADN)	:	III
Packing group (IMDG)	:	III
Packing group (IATA)	:	III

14.5 - Environmental hazards

Environmental hazards	:	Yes.
Marine pollutant	:	Hazardous to the aquatic environment - Aquatic Acute 1 Hazardous to the aquatic environment - Aquatic Chronic 1

14.6 - Special precautions for user

Chloride No.2 Photometer

ADR		
ADR Classification code:	:	M7
ADR Special provisions	:	274+335+375+601
ADR Limited quantity (LQ)	:	5 kg
ADR Excepted quantities	:	E1
ADR Packing instructions	:	P002 IBC08 LP02 R001
ADR Special packing provisions	:	PP12 B3
ADR Mixed packing provisions	:	MP10
Instructions for portable tanks and bulk containers	:	T1
Special provisions for portable tanks and bulk containers	:	TP33
ADR tank code	:	SGAV LGBV
ADR tanks special provisions	:	
Vehicle for tank carriage	:	AT
ADR Transport category	:	3
ADR Tunnel restriction code	:	E
ADR Special provisions loading, unloading and handling	:	CV13
Special provisions - Packages	:	V13
Special provisions - Bulk	:	VC1 VC2
Special provisions - Operation	:	
ADR Hazard identification number (Kemler No.)	:	90
RID		
Special provisions	:	
Limited quantity (LQ)	:	
Excepted quantities	:	
ADN		
Special provisions	:	
Limited quantity (LQ)	:	
Excepted quantities	:	
IMDG		
Special provisions	:	
Limited quantity (LQ)	:	
Excepted quantities	:	
Packing instructions	:	
Special packing provisions	:	
IBC instruction(s)	:	
IBC provisions	:	
Instructions for portable tanks and bulk containers	:	
Special provisions for portable tanks and bulk containers	:	
EmS codes	:	
Stowage and handling	:	
Segregation	:	
Properties and observations	:	

Chloride No.2 Photometer

IATA

PCA - Excepted quantities	:
PCA - Limited Quantity - Packing Instructions	:
PCA - Limited Quantity - Maximum Net Quantity per Package	:
PCA - Packing Instructions	:
PCA - Maximum Net Quantity per Package	:
CAO - Packing Instructions	:
CAO - Maximum Net Quantity per Package	:
Special Provisions	:
ERG Code	:

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	None
Substances Annex XIV	None
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	17.12.2018	MSDS creation.

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

Texts of the regulatory sentences

Acute Tox. 4 Oral	Acute toxicity (oral) - Category 4
Aquatic Acute 1	Hazardous to the aquatic environment - Aquatic Acute 1
Aquatic Chronic 1	Hazardous to the aquatic environment - Aquatic Chronic 1
Eye Irrit. 2	Eye irritation - Category 2
H272	May intensify fire; oxidiser
H302	Harmful if swallowed
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled
H335	May cause respiratory irritation
H400	Very toxic to aquatic life

Chloride No.2 Photometer

H410	Very toxic to aquatic life with long lasting effects
Ox. Sol. 2	Oxidising solids - Category 2
Ox. Sol. 3	Oxidising solids - Category 3
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 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.

*** *** ***