WATER-I.D.®
WATER TESTING EQUIPMENT

SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of:
Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

COD/CSB LR

Revision date 01-07-2025 **Revision Number** 1

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

1.1. Product identifier

Product Code(s) COD-79-LR

Product Name COD/CSB LR

Unique Formula Identifier (UFI) HSDG-DGCW-752F-YH2G

Pure substance/mixture Mixture
Contains Sulfuric acid, Sulfuric acid, mercury(2+) salt (1:1)

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

Recommended use Reagent for water analysis Restricted to professional users

Uses advised against Others

1.3. Details of the supplier of the safety data sheet

Manufacturer
Water-i.d. GmbH
Daimlerstr. 20
76344 Eggenstein, Germany
Tel.: +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

Emergency Telephone +44 1235 239670
English, Albanian, Bosnian, Bulgarian, Croatian, Czech, Danish, Dutch, Finnish, French, German, Greek, Hungarian, Italian, Latvian, Lithuanian, Norwegian, Polish, Portuguese, Romanian, Russian, Serbian, Slovak, Spanish, Swedish, Turkish and Ukrainian.

SECTION 2: Hazards identification

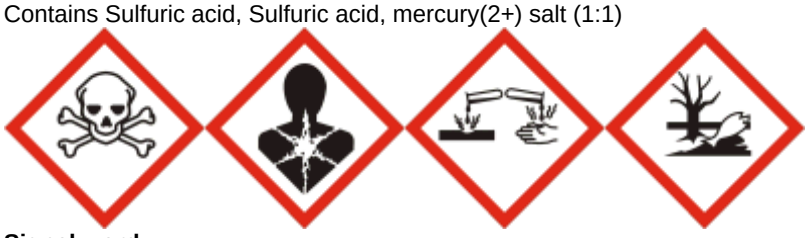
2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

Acute toxicity - Oral	Category 4 - (H302)
Acute toxicity - Dermal	Category 1 - (H310)
Acute toxicity - Inhalation (Dusts/Mists)	Category 2 - (H330)
Skin corrosion/irritation	Category 1 Sub-category A - (H314)
Serious eye damage/eye irritation	Category 1 - (H318)
Specific target organ toxicity — repeated exposure	Category 2 - (H373)
Hazardous to the aquatic environment - chronic	Category 1 - (H410)
Corrosive to metals	Category 1 - (H290)

2.2. Label elements

Contains Sulfuric acid, Sulfuric acid, mercury(2+) salt (1:1)



Signal word
Danger

Hazard statements
H290 - May be corrosive to metals
H302 - Harmful if swallowed
H310 - Fatal in contact with skin
H314 - Causes severe skin burns and eye damage
H373 - May cause damage to organs through prolonged or repeated exposure
H410 - Very toxic to aquatic life with long lasting effects

Precautionary Statements - EU (§28, 1272/2008)
P260 - Do not breathe dust, fume, gas, mist, vapors and spray
P280 - Wear protective gloves/protective clothing and eye/face protection
P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower
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 or doctor
P403 + P233 - Store in a well-ventilated place. Keep container tightly closed

Additional information
This product requires tactile warnings if supplied to the general public. This product requires child resistant fastenings if supplied to the general public.

2.3. Other hazards

Harmful to aquatic life.

SECTION 3: Composition/information on ingredients

3.1 Substances

Not applicable

3.2 Mixtures

Chemical name	Weight-%	REACH registration number	EC No (EU Index No)	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Specific concentration limit (SCL)	M-Factor	M-Factor (long-term)
Sulfuric acid 7664-93-9	80-90	No data available	231-639-5	Skin Corr. 1A (H314)	Eye Irrit. 2; H319: 5 % <= C <= 15 % Skin Corr. 1A; H314: C >= 15 % Skin Irrit. 2; H315: 5 % <= C < 15 %		
Sulfuric acid, mercury(2+) salt	<2	No data available	231-992-5	Acute Tox. 2 (H300) Acute Tox. 1 (H310)			

(1:1) 7783-35-9				Acute Tox. 2 (H330) STOT RE 2 (H373) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)			
Sulfuric acid, disilver(1+) salt 10294-26-5	<1	No data available	233-653-7	No data available			
Potassium dichromate 7778-50-9	<0.1	No data available	231-906-6	Acute Tox. 3 (H301) Acute Tox. 4 (H312) Acute Tox. 2 (H330) Skin Corr. 1B (H314) Resp. Sens. 1 (H334) Skin Sens. 1 (H317) Muta. 1B (H340) Carc. 1B (H350) Repr. 1B (H360FD) STOT RE 1 (H372) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410) Ox. Sol. 2 (H272)			

Full text of H- and EUH-phrases: see section 16

Acute Toxicity Estimate
If LD50/LC50 data is not available or does not correspond to the classification category, then the appropriate conversion value from CLP Annex I, Table 3.1.2, is used to calculate the acute toxicity estimate (ATEmix) for classifying a mixture based on its components

Chemical name	Oral LD50 mg/kg	Dermal LD50 mg/kg	Inhalation LC50 - 4 hour - dust/mist - mg/L	Inhalation LC50 - 4 hour - vapour - mg/L	Inhalation LC50 - 4 hour - gas - ppm
Sulfuric acid 7664-93-9	2140		0.375		
Sulfuric acid, mercury(2+) salt (1:1) 7783-35-9	57	625			
Potassium dichromate 7778-50-9	48	1150			

This product does not contain candidate substances of very high concern at a concentration >=0.1% (Regulation (EC) No. 1907/2006 (REACH), Article 59)

SECTION 4: First aid measures

4.1. Description of first aid measures

General advice Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.

Inhalation If breathing has stopped, give artificial respiration. Get medical attention immediately. Remove to fresh air. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. If breathing is difficult, (trained personnel should) give oxygen. Delayed pulmonary edema may occur. Get immediate medical attention.

Eye contact Get immediate medical attention. Rinse immediately with plenty of water, also under the

	eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Do not rub affected area. Remove contact lenses, if present and easy to do. Continue rinsing.
Skin contact	Get immediate medical attention. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.
Ingestion	Do NOT induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious person. Get immediate medical attention.
Self-protection of the first aider	Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Do not breathe vapour or mist. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Use personal protective equipment as required. See section 8 for more information. Avoid contact with skin, eyes or clothing.

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

Symptoms	Coughing and/ or wheezing. Difficulty in breathing. Burning sensation.

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

Note to doctors	Product is a corrosive material. Use of gastric lavage or emesis is contra-indicated. Possible perforation of stomach or esophagus should be investigated. Do not give chemical antidotes. Asphyxia from glottal edema may occur. Marked decrease in blood pressure may occur with moist rales, frothy sputum, and high pulse pressure.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable Extinguishing Media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Large Fire	CAUTION: Use of water spray when fighting fire may be inefficient.
Unsuitable extinguishing media	Do not scatter spilled material with high pressure water streams.

5.2. Special hazards arising from the substance or mixture

Specific hazards arising from the chemical	The product causes burns of eyes, skin and mucous membranes. Thermal decomposition can lead to release of irritating gases and vapours.

5.3. Advice for firefighters

Special protective equipment and precautions for fire-fighters	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions	Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal protective equipment as required. Evacuate personnel to safe areas. Do not breathe vapour or mist. Keep people away from and upwind of spill/leak. Attention! Corrosive material.
Other information	Refer to protective measures listed in Sections 7 and 8.
For emergency responders	Use personal protection recommended in Section 8.

6.2. Environmental precautions

Environmental precautions	Prevent further leakage or spillage if safe to do so. Should not be released into the

environment. Do not allow to enter into soil/subsoil. Prevent product from entering drains.

6.3. Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Take up mechanically, placing in appropriate containers for disposal.

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

6.4. Reference to other sections

Reference to other sections See section 8 for more information. See section 13 for more information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Take off contaminated clothing and wash it before reuse. Do not breathe vapour or mist. In case of insufficient ventilation, wear suitable respiratory equipment. Handle product only in closed system or provide appropriate exhaust ventilation. Do not eat, drink or smoke when using this product.

General hygiene considerations Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product. Do not breathe vapour or mist. Contaminated work clothing should not be allowed out of the workplace.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children. Store locked up. Protect from moisture. Store away from other materials.

7.3. Specific end use(s)

Risk Management Methods (RMM) The information required is contained in this Safety Data Sheet.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure Limits

Chemical name	European Union	Austria	Belgium	Bulgaria	Croatia
Sulfuric acid 7664-93-9	-	TWA: 0.1 mg/m³ STEL 0.2 mg/m³	TWA: 0.2 mg/m³	TWA: 0.05 mg/m³	TWA: 0.05 mg/m³
Sulfuric acid, mercury(2+) salt (1:1) 7783-35-9	TWA: 0.02 mg/m³	TWA: 0.02 mg/m³ STEL 0.08 mg/m³ H*	TWA: 0.02 mg/m³ *	TWA: 0.1 mg/m³ TWA: 0.02 mg/m³	TWA: 0.02 mg/m³
Sulfuric acid, disilver(1+) salt 10294-26-5	TWA: 0.01 mg/m³	TWA: 0.01 mg/m³	TWA: 0.01 mg/m³	TWA: 0.01 mg/m³	TWA: 0.01 mg/m³
Potassium dichromate 7778-50-9	TWA: 0.005 mg/m³ TWA: 0.010 mg/m³ TWA: 0.025 mg/m³	-	TWA: 0.05 mg/m³ TWA: 0.5 mg/m³	TWA: 0.010 mg/m³ TWA: 0.025 mg/m³	TWA: 0.010 mg/m³ TWA: 0.025 mg/m³
Chemical name	Cyprus	Czech Republic	Denmark	Estonia	Finland

Sulfuric acid 7664-93-9	TWA: 0.05 mg/m³	TWA: 1 mg/m³ TWA: 0.05 mg/m³ Ceiling: 2 mg/m³	TWA: 0.05 mg/m³	TWA: 0.5 mg/m³	TWA: 0.05 mg/m³ STEL: 0.1 mg/m³
Sulfuric acid, mercury(2+) salt (1:1) 7783-35-9	TWA: 0.02 mg/m³	TWA: 0.02 mg/m³ Ceiling: 0.15 mg/m³ *	TWA: 0.02 mg/m³ H*	TWA: 0.02 mg/m³	TWA: 0.02 mg/m³ iho*
Sulfuric acid, disilver(1+) salt 10294-26-5	TWA: 0.01 mg/m³	TWA: 0.01 mg/m³ Ceiling: 0.03 mg/m³	TWA: 0.01 mg/m³	TWA: 0.01 mg/m³	TWA: 0.01 mg/m³ STEL: 0.03 mg/m³
Potassium dichromate 7778-50-9	-	TWA: 0.01 mg/m³ Ceiling: 0.1 mg/m³	TWA: 0.001 mg/m³	TWA: 0.01 mg/m³ TWA: 0.025 mg/m³ TWA: 2 mg/m³	TWA: 0.005 mg/m³

Chemical name	France	Germany TRGS	Germany DFG	Greece	Hungary
Sulfuric acid 7664-93-9	TWA: 0.05 mg/m³	TWA: 0.1 mg/m³	TWA: 0.1 mg/m³ Peak: 0.1 mg/m³	TWA: 0.05 mg/m³	TWA: 0.05 mg/m³
Sulfuric acid, mercury(2+) salt (1:1) 7783-35-9	TWA: 0.1 mg/m³	TWA: 0.02 mg/m³	TWA: 0.02 mg/m³ Peak: 0.16 mg/m³ *	TWA: 0.02 mg/m³	TWA: 0.02 mg/m³ *
Sulfuric acid, disilver(1+) salt 10294-26-5	TWA: 0.01 mg/m³	TWA: 0.01 mg/m³	TWA: 0.01 mg/m³ Peak: 0.02 mg/m³	TWA: 0.01 mg/m³	TWA: 0.01 mg/m³
Potassium dichromate 7778-50-9	TWA: 0.001 mg/m³ STEL: 0.005 mg/m³	-	*	TWA: 0.5 mg/m³ TWA: 0.005 mg/m³ TWA: 0.010 mg/m³ TWA: 0.025 mg/m³	TWA: 0.5 mg/m³ TWA: 0.01 mg/m³ STEL: 2 mg/m³

Chemical name	Ireland	Italy MDLPS	Italy AIDII	Latvia	Lithuania
Sulfuric acid 7664-93-9	TWA: 0.05 ppm STEL: 0.15 ppm	TWA: 0.05 mg/m³	TWA: 0.2 mg/m³	TWA: 0.05 mg/m³	TWA: 0.05 mg/m³ STEL: 3 mg/m³
Sulfuric acid, mercury(2+) salt (1:1) 7783-35-9	TWA: 0.02 mg/m³ STEL: 0.06 mg/m³	TWA: 0.02 mg/m³ pelle*	TWA: 0.025 mg/m³ *	TWA: 0.02 mg/m³	* TWA: 0.02 mg/m³
Sulfuric acid, disilver(1+) salt 10294-26-5	TWA: 0.01 mg/m³ STEL: 0.03 mg/m³	TWA: 0.01 mg/m³	TWA: 0.01 mg/m³	TWA: 0.01 mg/m³	TWA: 0.1 mg/m³ TWA: 0.01 mg/m³
Potassium dichromate 7778-50-9	TWA: 0.005 mg/m³ TWA: 0.01 mg/m³ TWA: 0.025 mg/m³ STEL: 0.15 mg/m³ STEL: 0.03 mg/m³ STEL: 0.075 mg/m³	TWA: 0.05 mg/m³ TWA: 0.010 mg/m³ TWA: 0.025 mg/m³	TWA: 0.0002 mg/m³ STEL: 0.0005 mg/m³ *	TWA: 0.005 mg/m³ TWA: 0.010 mg/m³ TWA: 0.025 mg/m³ TWA: 0.01 mg/m³	Sensitizer TWA: 0.005 mg/m³ STEL: 0.015 mg/m³

Chemical name	Luxembourg	Malta	Netherlands	Norway	Poland
Sulfuric acid 7664-93-9	TWA: 0.05 mg/m³	TWA: 0.05 mg/m³	TWA: 0.05 mg/m³	STEL: 0.3 mg/m³	TWA: 0.05 mg/m³
Sulfuric acid, mercury(2+) salt (1:1) 7783-35-9	TWA: 0.02 mg/m³	-	TWA: 0.02 mg/m³	STEL: 0.06 mg/m³	TWA: 0.02 mg/m³
Sulfuric acid, disilver(1+) salt 10294-26-5	TWA: 0.01 mg/m³	-	TWA: 0.01 mg/m³	STEL: 0.03 mg/m³	TWA: 0.01 mg/m³
Potassium dichromate 7778-50-9	-	-	TWA: 0.001 mg/m³	STEL: 0.003 mg/m³	TWA: 0.010 mg/m³ TWA: 0.01 mg/m³

Chemical name	Portugal	Romania	Slovakia	Slovenia	Spain
Sulfuric acid 7664-93-9	TWA: 0.2 mg/m³	TWA: 0.05 mg/m³	TWA: 0.05 mg/m³	TWA: 0.05 mg/m³ STEL: STEL mg/m³	TWA: 0.05 mg/m³
Sulfuric acid, mercury(2+) salt (1:1) 7783-35-9	TWA: 0.02 mg/m³	TWA: 0.02 mg/m³	-	TWA: 0.02 mg/m³ STEL: STEL mg/m³ *	TWA: 0.02 mg/m³
Sulfuric acid, disilver(1+) salt 10294-26-5	TWA: 0.01 mg/m³	TWA: 0.01 mg/m³	TWA: 0.01 mg/m³	TWA: 0.01 mg/m³ STEL: STEL mg/m³	TWA: 0.01 mg/m³
Potassium dichromate 7778-50-9	TWA: 0.5 mg/m³ TWA: 0.05 mg/m³	-	-	TWA: 0.010 mg/m³ TWA: 0.025 mg/m³	TWA: 0.05 mg/m³

Chemical name	Sweden	Switzerland	United Kingdom
Sulfuric acid 7664-93-9	NGV: 0.1 mg/m³ Vägledande KGV: 0.2 mg/m³	TWA: 0.1 mg/m³ STEL: 0.2 mg/m³	TWA: 0.05 mg/m³ STEL: 0.15 mg/m³
Sulfuric acid, mercury(2+) salt (1:1) 7783-35-9	NGV: 0.02 mg/m³	TWA: 0.02 mg/m³ STEL: 0.16 mg/m³ H*	TWA: 0.02 mg/m³
Sulfuric acid, disilver(1+) salt 10294-26-5	NGV: 0.01 mg/m³ NGV: 0.1 mg/m³	TWA: 0.01 mg/m³ STEL: 0.02 mg/m³	TWA: 0.01 mg/m³
Potassium dichromate 7778-50-9	NGV: 0.005 mg/m³ Bindande KGV: 0.015 mg/m³ Sensitizer	TWA: 0.005 mg/m³ H*	TWA: 0.01 mg/m³ TWA: 0.025 mg/m³

Biological occupational exposure limits

Chemical name	European Union	Austria	Bulgaria	Croatia	Czech Republic
Sulfuric acid, mercury(2+) salt (1:1) 7783-35-9	-	25 µg/g Creatinine (urine - after end of work day, at the end of a work week/end of the shift)	-	10 µg/L - blood (Mercury) - not critical 30 µg/g Creatinine - urine (Mercury) - single sample or urine collected over 24 hours	-
Potassium dichromate 7778-50-9	-	9 µg/L (blood - Ethylenediaminetetraacetic acid not provided) 12 µg/L (urine - spontaneous urine after end of work day, at the end of a work week/end of the shift) (-)	-	5 µg/g Creatinine - urine (Chromium) - single sample at the end of the work shift	-

Chemical name	Denmark	Finland	France	Germany DFG	Germany TRGS
Sulfuric acid, mercury(2+) salt (1:1) 7783-35-9	-	-	0.015 mg/L - blood (Total inorganic Mercury) - end of shift at end of workweek 0.050 mg/g creatinine - urine (Total inorganic Mercury) - prior to shift	25 µg/g Creatinine (urine - Mercury no restriction) 25 µg/g Creatinine - BAT (not fixed) urine	25 µg/g Creatinine (urine - Mercury no restriction)
Potassium dichromate 7778-50-9	-	-	0.01 mg/g creatinine - urine (Total Chromium) - augmented during shift 0.03 mg/g creatinine - urine (Total Chromium) - end of shift at end of workweek	0.6 µg/L - BAR (end of exposure or end of shift) urine	-

Chemical name	Hungary	Ireland	Italy MDLPS	Italy AIDII
Sulfuric acid, mercury(2+) salt (1:1) 7783-35-9	0.030 mg/g Creatinine (urine - Mercury not critical) 0.017 µmol/mmol Creatinine (urine -	-	-	-

	Mercury not critical)			
Potassium dichromate 7778-50-9	-	25 µg/L (urine - total Chromium end of shift at end of workweek) 10 µg/L (urine - total Chromium increase during shift)	-	25 µg/L - urine (Total chromium) - end of shift at end of workweek 10 µg/L - urine (Total chromium) - increase during shift
Chemical name	Latvia	Luxembourg	Romania	Slovakia
Sulfuric acid, mercury(2+) salt (1:1) 7783-35-9	-	-	10 µg/L - blood (Mercury) - end of shift 30 µg/g Creatinine - urine (Mercury) - beginning of next shift	-
Chemical name	Slovenia	Spain	Switzerland	United Kingdom
Sulfuric acid, mercury(2+) salt (1:1) 7783-35-9	0.25 µg/g Creatinine - urine (Mercury) - not relevant 30 µg/L urine - urine (Mercury) - not relevant	-	-	-

Derived No Effect Level (DNEL) No information available.
Predicted No Effect Concentration (PNEC)

8.2. Exposure controls

Personal protective equipment

Eye/face protection Tight sealing safety goggles. Face protection shield.

Hand protection Wear suitable gloves. Impervious gloves.

Skin and body protection Impervious clothing. Wear suitable protective clothing. Long sleeved clothing. Chemical resistant apron.

Respiratory protection When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

General hygiene considerations Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product. Do not breathe vapour or mist. Contaminated work clothing should not be allowed out of the workplace.

Environmental exposure controls No information available.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state Liquid
Appearance Liquid
Colour yellow
Odour Odourless.
Odour threshold

Property	Values	Remarks • Method
Melting point / freezing point	No data available	None known
Boiling point / boiling range	No data available	None known

Flammability (solid, gas)	No data available	None known
Flammability Limit in Air		None known
Upper flammability or explosive limits	No data available	
Lower flammability or explosive limits	No data available	
Flash point	No data available	None known
Autoignition temperature	No data available	None known
Decomposition temperature		None known
pH	< 1	None known
pH (as aqueous solution)	No data available	No information available
Kinematic viscosity	No data available	None known
Dynamic viscosity	No data available	None known
Water solubility	No data available	None known
Solubility(ies)	No data available	None known
Partition coefficient	No data available	None known
Vapour pressure	No data available	None known
Relative density	No data available	None known
Bulk density	No data available	
Liquid Density	No data available	
Relative vapour density	No data available	None known
Particle characteristics		
Particle Size		
Particle Size Distribution		

9.2. Other information

9.2.1. Information with regards to physical hazard classes
Not applicable

9.2.2. Other safety characteristics

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity No information available.

10.2. Chemical stability

Stability Stable under normal conditions.

Explosion data
Sensitivity to mechanical impact None.
Sensitivity to static discharge None.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions None under normal processing.

10.4. Conditions to avoid

Conditions to avoid Excessive heat. Exposure to air or moisture over prolonged periods.

10.5. Incompatible materials

Incompatible materials Acids. Bases. Oxidising agent.

10.6. Hazardous decomposition products

Hazardous decomposition products None known based on information supplied.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Information on likely routes of exposure

Product Information

Inhalation Specific test data for the substance or mixture is not available. Fatal if inhaled. (based on components). Corrosive by inhalation. Inhalation of corrosive fumes/gases may cause coughing, choking, headache, dizziness, and weakness for several hours. Pulmonary edema may occur with tightness in the chest, shortness of breath, bluish skin, decreased blood pressure, and increased heart rate. Inhaled corrosive substances can lead to a toxic edema of the lungs. Pulmonary edema can be fatal.

Eye contact Specific test data for the substance or mixture is not available. Causes serious eye damage. (based on components). Corrosive to the eyes and may cause severe damage including blindness. May cause irreversible damage to eyes.

Skin contact Specific test data for the substance or mixture is not available. Fatal in contact with skin. (based on components). Corrosive. Causes burns.

Ingestion Specific test data for the substance or mixture is not available. Causes burns. (based on components). Ingestion causes burns of the upper digestive and respiratory tracts. May cause severe burning pain in the mouth and stomach with vomiting and diarrhea of dark blood. Blood pressure may decrease. Brownish or yellowish stains may be seen around the mouth. Swelling of the throat may cause shortness of breath and choking. May cause lung damage if swallowed. May be fatal if swallowed and enters airways.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms Coughing and/ or wheezing. Difficulty in breathing. Redness. Burning. May cause blindness.

Numerical measures of toxicity

Acute toxicity

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral) 301.10 mg/kg
ATEmix (dermal) 44.40 mg/kg
ATEmix (inhalation-dust/mist) 0.383 mg/l

Unknown acute toxicity

0 % of the mixture consists of ingredient(s) of unknown acute oral toxicity.
87.04 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity.
0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist).

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Sulfuric acid	= 2140 mg/kg (Rat)		= 0.375 mg/L (Rat) 4 h
Sulfuric acid, mercury(2+) salt (1:1)	= 57 mg/kg (Rat)	= 625 mg/kg (Rat)	
Potassium dichromate	= 48 mg/kg (Rat)	= 1150 mg/kg (Rabbit)	= 99 mg/m^3 (Rat) 4 h

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation Classification based on data available for ingredients. Causes burns.

Serious eye damage/eye irritation Classification based on data available for ingredients. Risk of serious damage to eyes. Causes burns.

Respiratory or skin sensitisation No information available.

Germ cell mutagenicity No information available.

The table below indicates ingredients above the cut-off threshold considered as relevant which are listed as mutagenic.

Chemical name	European Union
Potassium dichromate	Muta. 1B

Carcinogenicity No information available.

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical name	European Union
Potassium dichromate	Carc. 1B

Reproductive toxicity No information available.

The table below indicates ingredients above the cut-off threshold considered as relevant which are listed as reproductive toxins.

Chemical name	European Union
Potassium dichromate	Repr. 1B

STOT - single exposure No information available.

STOT - repeated exposure May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard No information available.

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

Endocrine disrupting properties

11.2.2. Other information

Other adverse effects

SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicity Harmful to aquatic life with long lasting effects.

Unknown aquatic toxicity Contains 12.92 % of components with unknown hazards to the aquatic environment.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Sulfuric acid	-	LC50: >500mg/L (96h, Brachydanio rerio)	-	-
Potassium dichromate	-	LC50: 113.6 - 155.7mg/L (96h, Lepomis macrochirus) LC50: 14 - 20.9mg/L	-	-

		(96h, Pimephales promelas) LC50: 15.41 - 30.36mg/L (96h, Pimephales promelas) LC50: 21.209 - 30.046mg/L (96h, Oryzias latipes) LC50: 23 - 41.2mg/L (96h, Poecilia reticulata) LC50: 24.81 - 34.55mg/L (96h, Poecilia reticulata) LC50: 65.6 - 137.6mg/L (96h, Lepomis macrochirus) LC50: =12.3mg/L (96h, Oncorhynchus mykiss) LC50: =320mg/L (96h, Lepomis macrochirus) LC50: >139mg/L (96h, Cyprinus carpio)		

12.2. Persistence and degradability

Persistence and degradability

12.3. Bioaccumulative potential

Bioaccumulation No information available.

12.4. Mobility in soil

Mobility in soil

12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment

Chemical name	PBT and vPvB assessment
Sulfuric acid	The substance is not PBT / vPvB PBT assessment does not apply
Sulfuric acid, disilver(1+) salt	PBT assessment does not apply
Potassium dichromate	PBT assessment does not apply

12.6. Endocrine disrupting properties

Endocrine disrupting properties

12.7. Other adverse effects
No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste from residues/unused products Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Contaminated packaging Do not reuse empty containers.

SECTION 14: Transport information

IATA

Notes	**Could not find a Marine Pollutant Name.**
14.1 UN number or ID number	UN2922
14.2 UN proper shipping name	Corrosive liquid, toxic, n.o.s. (Sulfuric acid, Sulfuric acid, mercury(2+) salt (1:1))
14.3 Transport hazard class(es)	8
Subsidiary hazard class	6.1
14.4 Packing group	II
Description	UN2922, Corrosive liquid, toxic, n.o.s. (Sulfuric acid, Sulfuric acid, mercury(2+) salt (1:1)), 8 (6.1), II
14.5 Environmental hazards	Yes
14.6 Special precautions for user	
Special Provisions	A3, A803
ERG Code	8P

IMDG

14.1 UN number or ID number	UN2922
14.2 UN proper shipping name	Corrosive liquid, toxic, n.o.s. (Sulfuric acid, Sulfuric acid, mercury(2+) salt (1:1))
14.3 Transport hazard class(es)	8
Subsidiary hazard class	6.1
14.4 Packing group	II
Description	UN2922, Corrosive liquid, toxic, n.o.s. (Sulfuric acid, Sulfuric acid, mercury(2+) salt (1:1)), 8 (6.1), II
14.5 Marine pollutant	NP
Environmental hazards	Yes
14.6 Special precautions for user	
Special Provisions	274
EmS-No	F-A, S-B
14.7 Maritime transport in bulk according to IMO instruments	

RID

Notes	**Could not find a Marine Pollutant Name.**
14.1 UN number or ID number	UN2922
14.2 UN proper shipping name	Corrosive liquid, toxic, n.o.s. (Sulfuric acid, Sulfuric acid, mercury(2+) salt (1:1))
14.3 Transport hazard class(es)	8
Subsidiary hazard class	6.1
14.4 Packing group	II
Description	UN2922, Corrosive liquid, toxic, n.o.s. (Sulfuric acid, Sulfuric acid, mercury(2+) salt (1:1)), 8 (6.1), II
14.5 Environmental hazards	Yes
14.6 Special precautions for user	
Special Provisions	274
Classification code	CT1

ADR

Notes	**Could not find a Marine Pollutant Name.**
14.1 UN number or ID number	UN2922
14.2 UN proper shipping name	Corrosive liquid, toxic, n.o.s. (Sulfuric acid, Sulfuric acid, mercury(2+) salt (1:1))
14.3 Transport hazard class(es)	8
Subsidiary hazard class	6.1
14.4 Packing group	II
Description	UN2922, Corrosive liquid, toxic, n.o.s. (Sulfuric acid, Sulfuric acid, mercury(2+) salt (1:1)), 8 (6.1), II, (E)
14.5 Environmental hazards	Yes
14.6 Special precautions for user	
Special Provisions	274
Classification code	CT1
Tunnel restriction code	(E)

SECTION 15: Regulatory information

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

National regulations

France
Occupational Illnesses (R-463-3, France)

Chemical name	French RG number	Title
Sulfuric acid, mercury(2+) salt (1:1) 7783-35-9	RG 2	-
Potassium dichromate 7778-50-9	RG 10,RG 10bis,RG 10ter	-

Chemical name	Netherlands - List of Carcinogens	Netherlands - List of Carcinogens	Netherlands - List of Reproductive Toxins
Sulfuric acid	Present	-	-
Potassium dichromate	Present	Present	Fertility Category 1B Can be harmful via breastfeeding Development Category 1B

European Union

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

Authorisations and/or restrictions on use:
This product contains one or more substance(s) subject to authorisation (Regulation (EC) No. 1907/2006 (REACH), Annex XIV)
This product contains one or more substance(s) subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

Chemical name	Restricted substance per REACH Annex XVII	Substance subject to authorisation per REACH Annex XIV
Potassium dichromate - 7778-50-9	72. 28. 29. 30.	X

Persistent Organic Pollutants
Not applicable

Export Notification requirements
This product contains substances which are regulated pursuant to Regulation (EC) No. 649/2012 of the European parliament and of the council concerning the export and import of dangerous chemicals

Chemical name	European Export/Import Restrictions per (EC) 649/2012 - Annex Number
Sulfuric acid, mercury(2+) salt (1:1) - 7783-35-9	V

Dangerous substance category per Seveso Directive (2012/18/EU)
H1 - ACUTE TOXIC
H2 - ACUTE TOXIC

Ozone-depleting substances (ODS) Regulation (EU) 2024/590
Not applicable

Chemical name	EU - Water Framework Directive (2000/60/EC)
Sulfuric acid, mercury(2+) salt (1:1) - 7783-35-9	Priority hazardous substance

Chemical name	EU - Environmental Quality Standards (2008/105/EC)
Sulfuric acid, mercury(2+) salt (1:1) - 7783-35-9	Priority hazardous substance

International Inventories

TSCA	Complies
DSL/NDSL	Complies
EINECS/ELINCS	Complies
ENCS	Complies
IECSC	Complies
KECL	Complies
PICCS	Complies
AICS	Complies

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances

15.2. Chemical safety assessment

Chemical Safety Report

SECTION 16: Other information

Key or legend to abbreviations and acronyms used in the safety data sheet

Full text of any hazard and/or precautionary statements referred to under Sections 2-15

H272 - May intensify fire; oxidiser
H300 - Fatal if swallowed
H301 - Toxic if swallowed
H310 - Fatal in contact with skin
H312 - Harmful in contact with skin
H314 - Causes severe skin burns and eye damage
H317 - May cause an allergic skin reaction
H330 - Fatal if inhaled
H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled
H340 - May cause genetic defects
H350 - May cause cancer
H360FD - May damage fertility. May damage the unborn child
H372 - Causes damage to organs through prolonged or repeated exposure
H373 - May cause damage to organs through prolonged or repeated exposure
H400 - Very toxic to aquatic life
H410 - Very toxic to aquatic life with long lasting effects

Legend

SVHC: Substances of Very High Concern for Authorisation:

Legend Section 8: Exposure controls/personal protection

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation

Classification procedure	
Classification according to Regulation (EC) No. 1272/2008 [CLP]	Method Used
Acute oral toxicity	Calculation method
Acute dermal toxicity	Calculation method
Acute inhalation toxicity - gas	Calculation method

Acute inhalation toxicity - Vapour	Calculation method
Acute inhalation toxicity - dust/mist	Calculation method
Skin corrosion/irritation	Calculation method
Serious eye damage/eye irritation	Calculation method
Respiratory sensitisation	Calculation method
Skin sensitisation	Calculation method
Mutagenicity	Calculation method
Carcinogenicity	Calculation method
Reproductive toxicity	Calculation method
STOT - single exposure	Calculation method
STOT - repeated exposure	Calculation method
Acute aquatic toxicity	Calculation method
Chronic aquatic toxicity	Calculation method
Aspiration hazard	Calculation method
Ozone	Calculation method

Key literature references and sources for data used to compile the SDS
Agency for Toxic Substances and Disease Registry (ATSDR)
U.S. Environmental Protection Agency ChemView Database
European Food Safety Authority (EFSA)
EPA (Environmental Protection Agency)
Acute Exposure Guideline Level(s) (AEGL(s))
U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act
U.S. Environmental Protection Agency High Production Volume Chemicals
Food Research Journal
Hazardous Substance Database
International Uniform Chemical Information Database (IUCLID)
Japan GHS Classification
Australian National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
NIOSH (National Institute for Occupational Safety and Health)
National Library of Medicine's ChemID Plus (NLM CIP)
National Library of Medicine's PubMed database (NLM PUBMED)
National Toxicology Program (NTP)
New Zealand's Chemical Classification and Information Database (CCID)
Organisation for Economic Co-operation and Development Environment, Health, and Safety Publications
Organisation for Economic Co-operation and Development High Production Volume Chemicals Programme
Organisation for Economic Co-operation and Development Screening Information Data Set
World Health Organization

Revision date 01-07-2025

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006
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End of Safety Data Sheet