

Safety Data Sheet

according to Regulation (EU) No. 1907/2006

24159-51 CSB/COD/DCO

Print date: 11/16/2010

Product code: 2415951

Page 1 of 7

1. Identification of the substance/preparation and of the company/undertaking

Identification of the substance or preparation

24159-51 CSB/COD/DCO

Use of the substance/preparation

Water analysis

Company/undertaking identification

Company name:	HACH LANGE GmbH
Street:	Willstätterstr. 11
Place:	D-40549 Düsseldorf
Telephone:	+49 (0)211 5288-383
e-mail:	SDS@hach-lange.de
Internet:	www.hach-lange.com
Responsible Department:	HACH LANGE Ltd. Pacific Way Salford Manchester M50 1DL - United Kingdom Tel. +44 (0) 161 872 1487 e-Mail: info@hach-lange.co.uk
	HACH LANGE Ltd. Unit 1, Chestnut Road Western Industrial Estate IRL-Dublin 12 Tel. +353 (0)1 4602522 e-Mail: info@hach-lange.ie

2. Hazards identification

Classification

Indications of danger : Toxic, Corrosive

R-phrases:

May cause cancer.

May cause heritable genetic damage.

Danger of cumulative effects.

Causes severe burns.

Harmful by inhalation, in contact with skin and if swallowed.

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

3. Composition/information on ingredients

Chemical characterization (Mixture)

Safety Data Sheet

according to Regulation (EU) No. 1907/2006

24159-51 CSB/COD/DCO

Print date: 11/16/2010

Product code: 2415951

Page 2 of 7

Hazardous components

EC-No.	CAS-No.	Chemical name	Quantity	Classification
231-639-5	7664-93-9	sulphuric acid ... %	86 %	C R35
231-791-2	7732-18-5	Water	25-40 %	
233-653-7	10294-26-5	Silver sulfate	<0,5 %	Xi R41
-	7783-35-9	inorganic compounds of mercury with the exception of mercuric sulphide and those specified elsewhere in this Annex	>0,5 %	T+, N R26/27/28-33-50-53
215-607-8	1333-82-0	chromium trioxide	<0,3 %	O, Carc. Cat. 1, Muta. Cat. 2, Repr. Cat. 3, T+, T, C, N R9-45-46-62-26-24/25-48/23-35-42/ 43-50-53

Full text of each relevant R phrase can be found in heading 16.

4. First aid measures

General information

Take off all contaminated clothing immediately.
Consult a physician. Show this safety data sheet to the doctor in attendance.

After inhalation

Move to fresh air.
Consult a physician. Show this safety data sheet to the doctor in attendance.

After contact with skin

Wash off immediately with plenty of water for at least 15 minutes.
Immediate medical treatment is necessary as untreated wounds from corrosion of the skin heal slowly and with difficulty. Show this safety data sheet to the doctor in attendance.

After contact with eyes

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. Show this safety data sheet to the doctor in attendance.

After ingestion

Clean mouth with water and drink afterwards plenty of water. Do NOT induce vomiting.
Consult a physician. Show this safety data sheet to the doctor in attendance.

Advice to doctor

Treat symptomatically.

5. Fire-fighting measures

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. The product itself does not burn.

Special exposure hazards arising from substance or preparation itself, combustion products, resulting gases

Fire may liberate hazardous vapours. The following may develop in event of fire: sulfur oxides, mercury vapors.

Special protective equipment for fire-fighters

In the event of fire, wear self-contained breathing apparatus. In order to avoid contact with skin, keep a safety distance and wear suitable protective clothing.

Additional information

Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

Safety Data Sheet

according to Regulation (EU) No. 1907/2006

24159-51 CSB/COD/DCO

Print date: 11/16/2010

Product code: 2415951

Page 3 of 7

6. Accidental release measures

Personal precautions

Use personal protective equipment.

Environmental precautions

Do not flush into surface water or sanitary sewer system.

Methods for cleaning up/taking up

Soak up with inert absorbent material and dispose of as hazardous waste.

Additional information

Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

7. Handling and storage

Handling

Advice on safe handling

Use only in well-ventilated areas. Do not breathe vapours/dust.

Storage

Requirements for storage rooms and vessels

Keep tightly closed in a dry, cool and well-ventilated place. Protect against light. Accessible only for authorized persons.

8. Exposure controls/personal protection

Exposure limit values

Exposure limits (EH40)

CAS-No.	Chemical name	ml/m ³	mg/m ³	F/ml	Category	Origin
7783-35-9	inorganic compounds of mercury with the exception of mercuric sulphide and those specified elsewhere in this Annex		0,1		TWA (8 h)	MAK
7664-93-9	Sulphuric acid (mist)	-	1		STEL (15 min)	MAK
		-	-		TWA (8 h)	EU
					STEL (15 min)	EU

Exposure controls

Protective and hygiene measures

The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Wash hands before breaks and after work.

Respiratory protection

Breathing apparatus only if aerosol or dust is formed.

Hand protection

Use barrier skin cream.

Chemical resistant gloves made of butyl rubber or nitrile rubber category III according to EN 374. In full contact: Gloves material: Viton, Layer thickness: 0.70 mm, Breakthrough time: >480 min. In splash

contact: Glove material: nitrile rubber, Layer thickness 0.40 mm, Breakthrough time: > 30 min

Eye protection

Safety glasses with side-shields

Safety Data Sheet

according to Regulation (EU) No. 1907/2006

24159-51 CSB/COD/DCO

Print date: 11/16/2010

Product code: 2415951

Page 4 of 7

Skin protection

Remove and wash contaminated clothing before re-use.

9. Physical and chemical properties

General information

Physical state: liquid
Colour: orange
Odour: odourless

Important health, safety and environmental information

	Test method
pH-Value (at 20 °C):	< 1
Changes in the physical state	
Boiling point:	300 °C
Flash point:	not applicable
Flammability	
Solid:	not applicable
Gas:	not applicable
Lower explosion limits:	not applicable
Upper explosion limits:	not applicable
Ignition temperature:	not applicable
Density (at 20 °C):	1,55 g/cm ³
Water solubility: (at 20 °C)	completely soluble

Other information

no data available

10. Stability and reactivity

Conditions to avoid

To avoid thermal decomposition, do not overheat. Above 300 °C, hazardous fumes may be released.

Materials to avoid

Organic materials, Bases, Alkali metals, Metals, Ammonia, Reducing agents, Nitric acid.
Reacts violently with water.

Hazardous decomposition products

Sulphur trioxide
Chromium oxides

Additional information

very reactive

11. Toxicological information

Acute toxicity

No data is available on the product itself. Information given is based on data on the components and the toxicology of similar products.

Corrosive and irritant effects

The product causes burns of eyes, skin and mucous membranes.

Sensitising effects

May cause sensitisation by inhalation and skin contact.

Safety Data Sheet

according to Regulation (EU) No. 1907/2006

24159-51 CSB/COD/DCO

Print date: 11/16/2010

Product code: 2415951

Page 5 of 7

Carcinogenic/mutagenic/toxic effects for reproduction

Known carcinogen. Mutagen

12. Ecological information

Ecotoxicity

May cause long-term adverse effects in the aquatic environment.
Do not flush into surface water or sanitary sewer system.

13. Disposal considerations

Advice on disposal

Our local agencies will accept used cuvettes to ensure their proper disposal.
In accordance with local and national regulations.

Waste disposal number of waste from residues/unused products

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

Waste disposal number of used product

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

14. Transport information

Land transport (ADR/RID)

UN number: 3264
ADR/RID class: 8
Warning plate
ADR/RID packing group: II

Description of the goods

Corrosive liquid, acidic, inorganic, n.o.s. (Sulphuric acid, phosphoric acid solution)

Inland waterways transport

Other applicable information (inland waterways transport)

Not tested

Marine transport

UN number: 3264
IMDG code: 8
Marine pollutant: --
IMDG packing group: II
EmS: F-A,S-B

Description of the goods

Corrosive liquid, acidic, inorganic, n.o.s., (Sulphuric acid/chromic acid solution)

Air transport

UN/ID number: 3264
ICAO/IATA-DGR: 8
ICAO packing group: II

Safety Data Sheet

according to Regulation (EU) No. 1907/2006

24159-51 CSB/COD/DCO

Print date: 11/16/2010

Product code: 2415951

Page 6 of 7

Description of the goods

Corrosive liquid, acidic, inorganic, n.o.s., (Sulphuric acid/chromic acid solution)

Other applicable information

Additional Information: This product may be shipped as part of a chemical kit composed of various compatible dangerous goods for analytical or testing purposes. This kit would have the following classification: Proper Shipping Name: Chemical Kit, Hazard Class: 9, UN Number 3316, Package group II, EMS Code: F-A, S-P
These transport data apply to the entire pack

15. Regulatory information

Labelling

Danger symbols:

T - Toxic; C - Corrosive



T - Toxic



C - Corrosive

Hazardous components which must be listed on the label

chromium trioxide
sulphuric acid ... %
Quecksilber(II) Sulfate

R phrases

- 45 May cause cancer.
- 46 May cause heritable genetic damage.
- 33 Danger of cumulative effects.
- 35 Causes severe burns.
- 20/21/22 Harmful by inhalation, in contact with skin and if swallowed.
- 52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S phrases

- 53 Avoid exposure - obtain special instructions before use.
- 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
- 36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

Special labelling for certain preparations

Restricted to professional users.

Additional advice on labelling

Classification according to European directive on classification of hazardous preparations 1999/45/EC.

National regulatory information

Employment restrictions: Observe employment restrictions for young people. Observe employment restrictions for child bearing mothers and nursing.

Water contaminating class (D): 2 - water contaminating

Additional information

professional use

16. Other information

Full text of R-phrases referred to under sections 2 and 3

- 09 Explosive when mixed with combustible material.

Safety Data Sheet

according to Regulation (EU) No. 1907/2006

24159-51 CSB/COD/DCO

Print date: 11/16/2010

Product code: 2415951

Page 7 of 7

20/21/22	Harmful by inhalation, in contact with skin and if swallowed.
24/25	Toxic in contact with skin and if swallowed.
26	Very toxic by inhalation.
26/27/28	Very toxic by inhalation, in contact with skin and if swallowed.
33	Danger of cumulative effects.
35	Causes severe burns.
41	Risk of serious damage to eyes.
42/43	May cause sensitization by inhalation and skin contact.
45	May cause cancer.
46	May cause heritable genetic damage.
48/23	Toxic: danger of serious damage to health by prolonged exposure through inhalation.
50	Very toxic to aquatic organisms.
52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
53	May cause long-term adverse effects in the aquatic environment.
62	Possible risk of impaired fertility.

Further Information

The information is based on present level of our knowledge. It does not, however, give assurances of product properties and establishes no contract legal rights.

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