

Safety Data Sheet

according to 2001/58/EC

LCK 311 Chlorid/Chloride/Chlorure, Sample cuvette, 1/2

Print date : 22.02.2006

Product code : LCK311-1

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

1.1 Identification of the substance or preparation

LCK 311 Chlorid/Chloride/Chlorure, Sample cuvette, 1/2

Use of the substance/preparation

Water analysis

1.2 Company/undertaking identification

Company name HACH LANGE GmbH
Street Willstätterstr. 11
Place D-40549 Düsseldorf

e-mail info@hach-lange.de
Inquiry office

Telephone +49(0)2115288 0
Telefax +49(0)2115288143

HACH LANGE Ltd.
Pacific Way
Salford Manchester M50 1DL - England
Tel. +44 (0) 161 872 1487
e-Mail: info@hach-lange.co.uk

2. Composition/information on ingredients

Chemical characterization (preparation)

Hazardous components

EC-No.	CAS-No.	Chemical name	Quantity	Classification
213-791-2	7732-18-5	Water	50,0-52,0 %	
200-659-6	67-56-1	methanol	<45 %	F, T R11-23/24/25-39/23/24/25
231-714-2	7697-37-2	nitric acid ... %	<6 %	O, C R8-35
209-773-0	592-85-8	Mercury(II) thiocyanate	<0,1 %	T+, N R33-26/27/28-50-53

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

3. Hazards identification

Classification

Symbols : Toxic, Corrosive

R-phrases :

Flammable.

Causes burns.

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

Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.

4. First aid measures

General information

Take off contaminated clothing and shoes immediately. Show this safety data sheet to the doctor in attendance.

After inhalation

Move to fresh air. Consult a physician.

After contact with skin

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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.

After contact with eyes

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

After ingestion

Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Consult a physician.

Advice to doctor

Treat symptomatically.

5. Fire-fighting measures

Suitable extinguishing media

water, carbon dioxide (CO₂), foam, dry powder

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

Fire may liberate hazardous vapours.

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

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

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.

7. Handling and storage

7.1 Handling

Advice on safe handling

Use only in well-ventilated areas.

7.2 Storage

Requirements for storage rooms and vessels

Keep tightly closed in a dry, cool and well-ventilated place. Keep locked up or in an area accessible only to qualified or authorised persons.

Further information on storage conditions

Keep refrigerated.

8. Exposure controls/personal protection

8.1 Exposure limit values

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Exposure limits (EH40)

CAS No.	Substance	ml/m ³	mg/m ³	F/ml	Category	Origin
592-85-8	Mercury(II) thiocyanate		0,1		TWA (8 h) STEL (15 min)	
67-56-1	Methanol	200	266		TWA (8 h)	WEL
		250	333		STEL (15 min)	WEL
7697-37-2	Nitric acid	2	5.2		TWA (8 h)	WEL
		4	10		STEL (15 min)	WEL

BAT values (TRGS 903)

CAS No.	Substance	Value	Parameter	Test material	Sampling time
67-56-1	Methanol	30 mg/l	Methanol	U	c,b

8.2 Exposure controls

Occupational exposure controls

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

Protective and hygiene measures

Wash hands before breaks and at the end of workday.

Respiratory protection

Breathing apparatus only if aerosol or dust is formed.

Hand protection

Use barrier skin cream. The selected protective gloves have to satisfy the specifications of EU Directive 89/689/EEC and the standard EN 374 derived from it.

Eye protection

safety glasses with side-shields

9. Physical and chemical properties

9.1 General information

Physical state	liquid
Colour	pink
Odour	sweet

9.2 Important health, safety and environmental information

pH-Value (at 20 °C) :	0,5	Test method
Changes in the physical state		
Boiling point	65 °C	
Flash point	24 °C	
Vapour pressure :	128 hPa	
at (20 °C)		
Density (at 20 °C) :	0,92 g/cm ³	
Water solubility :		completely miscible
at (20 °C)		

10. Stability and reactivity

Materials to avoid

oxidizing agents,
alkali metals

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Hazardous decomposition products

No dangerous reaction known under conditions of normal use.

11. Toxicological information

Corrosive and irritant effects

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

Severe effects after repeated or prolonged exposure

Concentration above the admissible concentration at the workplace may cause dizziness, headache and inebriation.

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.

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.

Waste disposal number of contaminated packaging

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)

ADR/RID class	9
Warning plate	
UN number	3316
ADR/RID packing group	II

Description of the goods

Chemical kit

Inland waterways transport

Remarks (inland waterways transport)

not tested

Marine transport

IMDG code	9
UN number	3316
Marine pollutant	--

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EmS F-A, S-P
IMDG packing group II

Description of the goods
Chemical kit

Air transport

ICAO/IATA-DGR 9
UN/ID number 3316
ICAO packing group II

Description of the goods
Chemical kit

Futher Information

This product forms part of a kit. Information in this section relates to the kit as a whole.

15. Regulatory information

15.1 Labelling

Indication of danger

T - Toxic; C - Corrosive



T - Toxic



C - Corrosive

Labelling according to EC-guidelines

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

Hazardous component(s) to be indicated on label

methanol
nitric acid ... %

R phrases

- 10 Flammable.
- 34 Causes burns.
- 23/24/25 Toxic by inhalation, in contact with skin and if swallowed.
- 39/23/24/25 Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.

S phrases

- 07 Keep container tightly closed.
- 16 Keep away from sources of ignition - No smoking.
- 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
- 36/37 Wear suitable protective clothing and gloves.

Special labelling for certain preparations

Restricted to professional users.

15.2 National regulations

Employment restrictions Observe employment restrictions for young people.
Water contaminating class 2 - water contaminating

16. Other information

List of relevant R phrases

- 08 Contact with combustible material may cause fire.
- 10 Flammable.
- 11 Highly flammable.

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- 33 Danger of cumulative effects.
- 34 Causes burns.
- 35 Causes severe burns.
- 50 Very toxic to aquatic organisms.
- 53 May cause long-term adverse effects in the aquatic environment.
- 23/24/25 Toxic by inhalation, in contact with skin and if swallowed.
- 26/27/28 Very toxic by inhalation, in contact with skin and if swallowed.
- 39/23/24/25 Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.

Other data

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.)

Safety Data Sheet

according to 2001/58/EC

LCK 311 Chlorid/Chloride/Chlorure, Zero solution, 2/2

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

1.1 Identification of the substance or preparation

LCK 311 Chlorid/Chloride/Chlorure, Zero solution, 2/2

Use of the substance/preparation

Water analysis

1.2 Company/undertaking identification

Company name HACH LANGE GmbH
Street Willstätterstr. 11
Place D-40549 Düsseldorf

e-mail info@hach-lange.de
Inquiry office

Telephone +49(0)2115288 0
Telefax +49(0)2115288143

HACH LANGE Ltd.
Pacific Way
Salford Manchester M50 1DL - England
Tel. +44 (0) 161 872 1487
e-Mail: info@hach-lange.co.uk

2. Composition/information on ingredients

Chemical characterization (preparation)

Hazardous components

EC-No.	CAS-No.	Chemical name	Quantity	Classification
213-791-2	7732-18-5	Water	<60 %	
200-659-6	67-56-1	methanol	<36 %	F, T R11-23/24/25-39/23/24/25
231-714-2	7697-37-2	nitric acid ... %	<5 %	O, C R8-35
209-773-0	592-85-8	Mercury(II) thiocyanate	<0,1 %	T+, N R33-26/27/28-50-53

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

3. Hazards identification

Classification

Symbols : Toxic, Corrosive

R-phrases :

Flammable.

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

Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.

4. First aid measures

General information

Take off contaminated clothing and shoes immediately. Show this safety data sheet to the doctor in attendance.

After inhalation

Move to fresh air. Consult a physician.

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.

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After contact with eyes

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

After ingestion

Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Consult a physician.

Advice to doctor

Treat symptomatically.

5. Fire-fighting measures

Suitable extinguishing media

water, carbon dioxide (CO₂), foam, dry powder

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

Fire may liberate hazardous vapours.

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

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

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.

7. Handling and storage

7.1 Handling

Advice on safe handling

Use only in well-ventilated areas.

7.2 Storage

Requirements for storage rooms and vessels

Keep tightly closed in a dry, cool and well-ventilated place. Keep locked up or in an area accessible only to qualified or authorised persons.

8. Exposure controls/personal protection

8.1 Exposure limit values

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Exposure limits (EH40)

CAS No.	Substance	ml/m ³	mg/m ³	F/ml	Category	Origin
592-85-8	Mercury(II) thiocyanate		0,1		TWA (8 h) STEL (15 min)	
67-56-1	Methanol	200	266		TWA (8 h)	WEL
		250	333		STEL (15 min)	WEL
7697-37-2	Nitric acid	2	5.2		TWA (8 h)	WEL
		4	10		STEL (15 min)	WEL

BAT values (TRGS 903)

CAS No.	Substance	Value	Parameter	Test material	Sampling time
67-56-1	Methanol	30 mg/l	Methanol	U	c,b

8.2 Exposure controls

Occupational exposure controls

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

Protective and hygiene measures

Wash hands before breaks and at the end of workday.

Respiratory protection

Breathing apparatus only if aerosol or dust is formed.

Hand protection

Use barrier skin cream. The selected protective gloves have to satisfy the specifications of EU Directive 89/689/EEC and the standard EN 374 derived from it.

Eye protection

safety glasses with side-shields

9. Physical and chemical properties

9.1 General information

Physical state	liquid
Colour	pink
Odour	sweet

9.2 Important health, safety and environmental information

pH-Value (at 20 °C) :	0,3	Test method
Changes in the physical state		
Boiling point	65 °C	
Flash point	24 °C	
Vapour pressure :	128 hPa	
at (20 °C)		
Density (at 20 °C) :	~1 g/cm ³	
Water solubility :	completely miscible	
at (20 °C)		

10. Stability and reactivity

Materials to avoid

oxidizing agents,
alkali metals

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Hazardous decomposition products

No dangerous reaction known under conditions of normal use.

11. Toxicological information

Corrosive and irritant effects

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

Severe effects after repeated or prolonged exposure

Concentration above the admissible concentration at the workplace may cause dizziness, headache and inebriation.

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.

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.

Waste disposal number of contaminated packaging

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)

ADR/RID class	9
Warning plate	
UN number	3316
ADR/RID packing group	II

Description of the goods

Chemical kit

Inland waterways transport

Remarks (inland waterways transport)

not tested

Marine transport

IMDG code	9
UN number	3316
Marine pollutant	--

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IMDG packing group II

Description of the goods

Chemical kit

Air transport

ICAO/IATA-DGR 9
UN/ID number 3316
ICAO packing group II

Description of the goods

Chemical kit

Further Information

This product forms part of a kit. Information in this section relates to the kit as a whole.

15. Regulatory information

15.1 Labelling

Indication of danger T - Toxic



T - Toxic

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

Hazardous component(s) to be indicated on label

methanol

R phrases

- 10 Flammable.
- 23/24/25 Toxic by inhalation, in contact with skin and if swallowed.
- 39/23/24/25 Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.

S phrases

- 07 Keep container tightly closed.
- 16 Keep away from sources of ignition - No smoking.
- 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
- 36/37 Wear suitable protective clothing and gloves.

15.2 National regulations

Employment restrictions Observe employment restrictions for young people.
Water contaminating class 1 - slightly water contaminating

16. Other information

List of relevant R phrases

- 08 Contact with combustible material may cause fire.
- 10 Flammable.
- 11 Highly flammable.
- 33 Danger of cumulative effects.
- 35 Causes severe burns.
- 50 Very toxic to aquatic organisms.
- 53 May cause long-term adverse effects in the aquatic environment.
- 23/24/25 Toxic by inhalation, in contact with skin and if swallowed.

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- 26/27/28 Very toxic by inhalation, in contact with skin and if swallowed.
39/23/24/25 Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.

Other data

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.)