according to Regulation (EC) No 1907/2006

LCK 323 Fluorid/Fluoride/Fluorure; 1/1

Revision date: 06.03.2018 Product code: LCK323 Page 1 of 9

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

1.1. Product identifier

LCK 323 Fluorid/Fluoride/Fluorure; 1/1

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

Use of the substance/mixture

Water analysis

1.3. Details of the supplier of the safety data sheet

Company name: HACH LANGE GmbH
Street: Willstätterstr. 11
Place: D-40549 Düsseldorf
Telephone: +49 (0)211 5288-383
e-mail: SDS@hach.com
Internet: www.de.hach.com
Responsible Department: HACH LANGE Ltd.

5, Pacific Way Salford Manchester M50 1DL

Salford Manchester M50 1DL - United Kingdom Tel. +44 (0) 161 872 1487 * Fax +44 (0) 161 848 7324

e-Mail: info-uk@hach.com

HACH LANGE Ltd.

Unit 1, Chestnut Road Western Industrial Estate

IRL-Dublin 12

Tel. +353 (0)1 4602522 e-Mail: info-ie@hach.com

1.4. Emergency telephone Poison Control Center Mainz: Tel: +49 (0) 6131 19240 - 24 hour emergency

number: service -

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No. 1272/2008

Hazard categories:

Skin corrosion/irritation: Skin Corr. 1B

Hazard Statements:

Causes severe skin burns and eye damage.

2.2. Label elements

Regulation (EC) No. 1272/2008

Hazard components for labelling

hydrochloric acid 8 %

Signal word: Danger

Pictograms:



Hazard statements

H314 Causes severe skin burns and eye damage.

Precautionary statements

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

according to Regulation (EC) No 1907/2006

	LCK 323 Fluorid/Fluoride/Fluorure; 1/1	
Revision date: 06.03.2018	Product code: LCK323	Page 2 of 9

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.

Additional advice on labelling

The product is classified as dangerous in accordance with Regulation (EC) No. 1272/2008.

2.3. Other hazards

no data available

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous components

CAS No	lo Chemical name			Quantity	
	EC No	Index No	REACH No		
	GHS Classification	•			
7732-18-5	Water			> 90 %	
	231-791-2				
7647-01-0	hydrogen chloride				
	231-595-7	017-002-00-2	01-2119484862-27		
	Acute Tox. 3, Skin Corr. 1A; H331 H314				

Full text of H and EUH statements: see section 16.

SECTION 4: First aid measures

4.1. Description of 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.

If symptoms persist, call a physician.

After contact with skin

Wash off immediately with plenty of water for at least 15 minutes.

If skin irritation persists, call a physician.

After contact with eyes

In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

After ingestion

Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Obtain medical attention.

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

Irritation and corrosion

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

according to Regulation (EC) No 1907/2006

LCK 323 Fluorid/Fluoride/Fluorure; 1/1

Revision date: 06.03.2018 Product code: LCK323 Page 3 of 9

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

5.2. Special hazards arising from the substance or mixture

Fire may liberate hazardous vapours.

5.3. Advice for firefighters

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

Additional information

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

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Only qualified personnel equipped with suitable protective equipment may intervene. Immediately evacuate personnel to safe areas.

Do not breathe vapours, mist or gas. Ensure adequate ventilation.

6.2. Environmental precautions

Do not flush into surface water or sanitary sewer system.

6.3. Methods and material for containment and cleaning up

Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local/national regulations (see section 13).

6.4. Reference to other sections

13. Disposal considerations

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Use only in well-ventilated areas. Avoid contact with skin and eyes.

Advice on protection against fire and explosion

None known.

Further information on handling

Observe label precautions.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed in a dry and well-ventilated place.

7.3. Specific end use(s)

Reagent for analysis

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m³	fibres/ml	Category	Origin
7647-01-0	Hydrogen chloride (gas and aerosol mists)	1	2		TWA (8 h)	WEL
		5	8		STEL (15 min)	WEL

Additional advice on limit values

None known.

according to Regulation (EC) No 1907/2006

LCK 323 Fluorid/Fluoride/Fluorure; 1/1

Revision date: 06.03.2018 Product code: LCK323 Page 4 of 9

8.2. Exposure controls

Appropriate engineering controls

Technical measures and appropriate working operations should be given priority over the use of personal protective equipment.

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 at the end of workday.

Eye/face protection

Safety glasses with side-shields

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 0,20 mm, Breakthrough time: > 30 min

Consult your supplier if the material is to be used for special applications such as in the food industry or for hygiene, medical or surgical end-use.

Skin protection

Avoid contact with skin, eyes and clothing.

Respiratory protection

Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction.

Environmental exposure controls

Should not be released into the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: liquid
Colour: red
Odour: odourless

pH-Value (at 20 °C): 0,5

Changes in the physical state

Melting point:

Initial boiling point and boiling range:

Sublimation point:

Softening point:

Pour point:

Flash point:

not applicable
not applicable
not applicable
not applicable
not applicable

Flammability

Solid: no data available
Gas: no data available

Explosive properties

no data available

Lower explosion limits:

Upper explosion limits:

Ignition temperature:

not applicable
not applicable
not applicable

Auto-ignition temperature

according to Regulation (EC) No 1907/2006

	LCK 323 Fluorid/Fluoride/Fluorure; 1/1	
Revision date: 06.03.2018	Product code: LCK323	Page 5 of 9

Solid: not applicable
Gas: not applicable
Decomposition temperature: no data available

Oxidizing properties

not applicable

Vapour pressure:

Density (at 20 °C):

Bulk density:

National equation of the problem of the pr

(at 20 °C)

Solubility in other solvents

no data available

Partition coefficient: no data available Viscosity / dynamic: no data available Viscosity / kinematic: no data available no data available Flow time: no data available Vapour density: Evaporation rate: no data available Solvent separation test: no data available Solvent content: no data available

9.2. Other information

Solid content: not applicable

SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reaction known under conditions of normal use.

10.2. Chemical stability

Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

Hazardous polymerisation does not occur.

10.4. Conditions to avoid

Extremes of temperature and direct sunlight.

10.5. Incompatible materials

None known.

10.6. Hazardous decomposition products

Hydrogen chloride gas

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicocinetics, metabolism and distribution

No toxicology information is available.

Acute toxicity

No data is available on the product itself.

according to Regulation (EC) No 1907/2006

LCK 323 Fluorid/Fluoride/Fluorure; 1/1

Revision date: 06.03.2018 Product code: LCK323 Page 6 of 9

CAS No	Chemical name						
	Exposure route	Dose	Species	Source	Method		
7647-01-0	hydrogen chloride						
	inhalation vapour	ATE 3 mg/l					
	inhalation aerosol	ATE 0,5 mg/l					

Irritation and corrosivity

Causes eye burns. Causes skin burns.

Sensitising effects

No known effect.

Carcinogenic/mutagenic/toxic effects for reproduction

Contains no ingredient listed as a carcinogen

STOT-single exposure

The substance or mixture is not classified as specific target organ toxicant, single exposure.

STOT-repeated exposure

The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Aspiration hazard

No aspiration toxicity classification

Specific effects in experiment on an animal

No data is available on the product itself.

Additional information on tests

no data available

Practical experience

Observations relevant to classification

no data available

Other observations

no data available

Further information

Other dangerous properties can not be excluded. Handle in accordance with good industrial hygiene and safety practice.

SECTION 12: Ecological information

12.1. Toxicity

No information on ecology is available.

Should not be released into the environment.

12.2. Persistence and degradability

No data is available on the product itself.

12.3. Bioaccumulative potential

No data is available on the product itself.

12.4. Mobility in soil

no data available

12.5. Results of PBT and vPvB assessment

no data available

12.6. Other adverse effects

no data available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

according to Regulation (EC) No 1907/2006

LCK 323 Fluorid/Fluoride/Fluorure; 1/1

Revision date: 06.03.2018 Product code: LCK323 Page 7 of 9

Disposal recommendations

In accordance with local and national regulations.

Our local agencies will accept used cuvettes to ensure their proper disposal.

List of Wastes Code - residues/unused products

160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and

discarded chemicals; laboratory chemicals, consisting of or containing hazardous substances,

including mixtures of laboratory chemicals; hazardous waste

List of Wastes Code - used product

160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and

discarded chemicals; laboratory chemicals, consisting of or containing hazardous substances,

including mixtures of laboratory chemicals; hazardous waste

List of Wastes Code - contaminated packaging

160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and

discarded chemicals; laboratory chemicals, consisting of or containing hazardous substances,

including mixtures of laboratory chemicals; hazardous waste

Contaminated packaging

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

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number: UN 3316

14.2. UN proper shipping name: Chemical kit

14.3. Transport hazard class(es):

14.4. Packing group:

Hazard label: 9



Classification code: M11
Special Provisions: 251 340
Limited quantity: SP251
Excepted quantity: SP340
Transport category: 2
Hazard No: Tunnel restriction code: E

Inland waterways transport (ADN)

Other applicable information (inland waterways transport)

Not tested

Marine transport (IMDG)

<u>14.1. UN number:</u> UN 3316

14.2. UN proper shipping name: CHEMICAL KIT

14.3. Transport hazard class(es): 9
14.4. Packing group: ||

Hazard label: 9

according to Regulation (EC) No 1907/2006

LCK 323 Fluorid/Fluoride/Fluorure; 1/1

Revision date: 06.03.2018 Product code: LCK323 Page 8 of 9

Marine pollutant: -

Special Provisions: 251, 340
Limited quantity: See SP251
Excepted quantity: SP340
EmS: F-A, S-P

Other applicable information (marine transport)

00000000308

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number:UN 331614.2. UN proper shipping name:CHEMICAL KIT

 14.3. Transport hazard class(es):
 9

 14.4. Packing group:
 II

 Hazard label:
 9



Special Provisions:A44 A163Limited quantity Passenger:1 kgPassenger LQ:Y960Excepted quantity:E0

IATA-packing instructions - Passenger:960IATA-max. quantity - Passenger:10 kgIATA-packing instructions - Cargo:960IATA-max. quantity - Cargo:10 kg

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

14.6. Special precautions for user

Use personal protective equipment.

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not relevant

SECTION 15: Regulatory information

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

National regulatory information

Employment restrictions: Observe restrictions to employment for juvenils according to the 'juvenile

work protection guideline' (94/33/EC).

Water contaminating class (D): 1 - slightly water contaminating

15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Changes

Revision: 06.03.2018

Safety datasheet sections which have been updated: 11, 12, 15

Revision Date 09.03.2017

Safety datasheet sections which have been updated: 4, 14

Revision: 11.03.2015

according to Regulation (EC) No 1907/2006

LCK 323 Fluorid/Fluoride/Fluorure; 1/1

Revision date: 06.03.2018 Product code: LCK323 Page 9 of 9

Safety datasheet sections which have been updated: 2, 4-13,16

Relevant H and EUH statements (number and full text)

H314 Causes severe skin burns and eye damage.

H331 Toxic if inhaled.

Further Information

The information is based on the present level of our knowledge. It does not, however, give assurance 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.)