according to Regulation (EC) No 1907/2006

# LCK 308 Cadmium, Sample cuvette; 1/3

Revision date: 19.09.2019 Product code: LCK308-1 Page 1 of 10

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

#### 1.1. Product identifier

LCK 308 Cadmium, Sample cuvette; 1/3

## 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 - 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

<u>1.4. Emergency telephone</u> 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:

Substance or mixture corrosive to metals: Met. Corr. 1

Flammable liquid: Flam. Liq. 3 Skin corrosion/irritation: Skin Corr. 1A

Hazard Statements:

May be corrosive to metals. Flammable liquid and vapour.

Causes severe skin burns and eye damage.

## 2.2. Label elements

#### Regulation (EC) No. 1272/2008

## Hazard components for labelling

potassium hydroxide; caustic potash

ethanol; ethyl alcohol

Signal word: Danger

Pictograms:





according to Regulation (EC) No 1907/2006

## LCK 308 Cadmium, Sample cuvette; 1/3

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#### **Hazard statements**

H226 Flammable liquid and vapour. H290 May be corrosive to metals.

H314 Causes severe skin burns and eye damage.

#### **Precautionary statements**

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No

smoking.

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

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

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/doctor.

#### Additional advice on labelling

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

#### 2.3. Other hazards

None known.

## **SECTION 3: Composition/information on ingredients**

#### 3.2. Mixtures

#### **Hazardous components**

CAS No	Chemical name						
	EC No	Index No	REACH No				
	GHS Classification		•				
7732-18-5	Water			>70 %			
	231-791-2						
64-17-5	ethanol, ethyl alcohol	25 %					
	200-578-6	603-002-00-5	01-2119457610-43				
	Flam. Liq. 2; H225						
1310-58-3	potassium hydroxide; caustic	<2 %					
	215-181-3	019-002-00-8					
	Acute Tox. 4, Skin Corr. 1A; H						

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.

according to Regulation (EC) No 1907/2006

#### LCK 308 Cadmium, Sample cuvette; 1/3

Revision date: 19.09.2019 Product code: LCK308-1 Page 3 of 10

#### 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

#### 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.

#### 6.2. Environmental precautions

Do not flush into surface water or sanitary sewer system.

#### 6.3. Methods and material for containment and cleaning up

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal.

#### 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.

#### 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.

Storage temperature: 2-8 °C

Keep away from heat and sources of ignition.

#### 7.3. Specific end use(s)

Reagent for analysis

#### **SECTION 8: Exposure controls/personal protection**

according to Regulation (EC) No 1907/2006

# LCK 308 Cadmium, Sample cuvette; 1/3

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## 8.1. Control parameters

#### **Exposure limits (EH40)**

CAS No	Substance	ppm	mg/m³	fibres/ml	Category	Origin
64-17-5	Ethanol	1000	1920		TWA (8 h)	WEL
1310-58-3	Potassium hydroxide	-	2		STEL (15 min)	WEL

#### Additional advice on limit values

None known.

# 8.2. Exposure controls

## Appropriate engineering 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.

## Eye/face protection

Safety glasses with side-shields

#### Hand protection

Use barrier skin cream.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard

EN 374 derived from it.
In case of full contact:
Glove material: butyl-rubber
Layer thickness: 0,7 mm
Break through time: >480 min
In case of contact through splashing:
Glove material: Nitrile rubber
Layer thickness: 0,40 mm
Break through time: >120 min

#### 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.

# **SECTION 9: Physical and chemical properties**

# 9.1. Information on basic physical and chemical properties

Physical state: liquid
Colour: violet
Odour: alcohol-like

pH-Value (at 20 °C):

# Changes in the physical state

Melting point:

Initial boiling point and boiling range:

Sublimation point:

Softening point:

Pour point:

Pour point:

Flash point:

not applicable
not applicable
not applicable
28 °C

according to Regulation (EC) No 1907/2006

LCK 308 Cadmium, Sample cuvette; 1/3	<b>LCK 308</b>	Cadmium,	Sample	cuvette;	1/3	
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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** 

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

**Oxidizing properties** 

not applicable

Vapour pressure:

Density (at 20 °C):

Bulk density:

Not applicable

Water solubility:

soluble

(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 Flow time: no data available Vapour density: no data available no data available Evaporation rate: no data available Solvent separation test: no data available Solvent content:

9.2. Other information

Solid content: not applicable

Corrosive in contact with metals

## **SECTION 10: Stability and reactivity**

# 10.1. Reactivity

None known.

## 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

Heat, flames and sparks.

#### 10.5. Incompatible materials

None known.

according to Regulation (EC) No 1907/2006

# LCK 308 Cadmium, Sample cuvette; 1/3

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# 10.6. Hazardous decomposition products

Contact with metals liberates hydrogen 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.

CAS No	Chemical name									
	Exposure route	Dose		Species	Source	Method				
64-17-5	ethanol, ethyl alcohol									
	oral	LD50 mg/kg	6200	Rat	IUCLID					
	inhalation (4 h) vapour	LC50	95,6 mg/l	Rat	RTECS					
1310-58-3	potassium hydroxide; caustic potash									
	oral	LD50 mg/kg	333	Rat	Merck					

#### Irritation and corrosivity

Causes skin and eye 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 toxicology information is available.

## Additional information on tests

None known.

# **Further information**

Handle in accordance with good industrial hygiene and safety practice.

# **SECTION 12: Ecological information**

#### 12.1. Toxicity

No information on ecology is available.

according to Regulation (EC) No 1907/2006

# LCK 308 Cadmium, Sample cuvette; 1/3

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CAS No	Chemical name	Chemical name								
	Aquatic toxicity	Dose	[h]   [d]	Species	Source	Method				
64-17-5	ethanol, ethyl alcohol	ethanol, ethyl alcohol								
	Acute crustacea toxicity	EC50 9268 - 14221 mg/l	48 h	Daphnia magna	IUCLID					
1310-58-3	potassium hydroxide; cau	potassium hydroxide; caustic potash								
	Acute fish toxicity	LC50 80 mg/l	96 h	Gambusia affinis	IUCLID					

#### 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.

#### Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
64-17-5	ethanol, ethyl alcohol	-0,31

# 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 known effect.

# **SECTION 13: Disposal considerations**

## 13.1. Waste treatment methods

#### **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

# **SECTION 14: Transport information**

# Land transport (ADR/RID)

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

according to Regulation (EC) No 1907/2006

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Classification code: M11
Special Provisions: 251 340
Limited quantity: SP251
Excepted quantity: SP340
Transport category: 2
Tunnel restriction code: E

#### Inland waterways transport (ADN)

Other applicable information (inland waterways transport)

Not tested

Marine transport (IMDG)

14.1. UN number: UN 3316

14.2. UN proper shipping name: CHEMICAL KIT

 14.3. Transport hazard class(es):
 9

 14.4. Packing group:
 II

 Hazard label:
 9



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

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number: UN 3316
14.2. UN proper shipping name: CHEMICAL KIT

14.3. Transport hazard class(es):914.4. Packing group:IIHazard label:9



Special Provisions: A44 A163
Limited quantity Passenger: 1 kg
Passenger LQ: Y960
Excepted 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

The product does not need to be labelled in accordance with EC directives or respective national laws.

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

Not relevant

according to Regulation (EC) No 1907/2006

## LCK 308 Cadmium, Sample cuvette; 1/3

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#### Other applicable information

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

# **SECTION 15: Regulatory information**

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

#### **EU** regulatory information

Restrictions on use (REACH, annex XVII):

Entry 3: ethanol, ethyl alcohol

# National regulatory information

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

work protection guideline' (94/33/EC). Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or

nursing mothers.

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 Date 19.09.2019

Safety datasheet sections which have been updated: 8, 15, 16

Revision Date 23.08.2017

Safety datasheet sections which have been updated: 2, 3

Revision Date 09.03.2017

Safety datasheet sections which have been updated: 7, 14

Revision: 15.02.2016

This data sheet contains changes from the previous version in section(s): 2, 4, 11

Revision: 09.10.2014

This data sheet contains changes from the previous version in section(s): 2

Revision: 16.09.2014

This data sheet contains changes from the previous version in section(s): 7.2

Revision: 25.03.2014

This data sheet contains changes from the previous version in section(s): 4-16

#### Classification for mixtures and used evaluation method according to Regulation (EC) No. 1272/2008 [CLP]

Classification	Classification procedure				
Met. Corr. 1; H290	On basis of test data				
Flam. Liq. 3; H226	On basis of test data				
Skin Corr. 1A; H314	Calculation method				

# Relevant H and EUH statements (number and full text)

H225 Highly flammable liquid and vapour.
H226 Flammable liquid and vapour.
H290 May be corrosive to metals.
H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

#### **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.

according to Regulation (EC) No 1907/2006

LCK 308 Cadmium, Sample cuvette; 1/3

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

according to Regulation (EC) No 1907/2006

## LCK 308 Cadmium, LCK 308 A; 2/3

Revision date: 19.09.2019 Product code: LCK308-2 Page 1 of 10

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

#### 1.1. Product identifier

LCK 308 Cadmium, LCK 308 A; 2/3

## 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 - 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:

Substance or mixture corrosive to metals: Met. Corr. 1

Acute toxicity: Acute Tox. 1 Acute toxicity: Acute Tox. 3 Acute toxicity: Acute Tox. 3

Skin corrosion/irritation: Skin Corr. 1B

Hazardous to the aquatic environment: Aquatic Chronic 2

Hazard Statements:

May be corrosive to metals.

Fatal if inhaled.
Toxic if swallowed.
Toxic in contact with skin.

Causes severe skin burns and eye damage. Toxic to aquatic life with long lasting effects.

#### 2.2. Label elements

#### Regulation (EC) No. 1272/2008

# Hazard components for labelling

Potassium cyanide

potassium hydroxide; caustic potash

Signal word: Danger

according to Regulation (EC) No 1907/2006

## LCK 308 Cadmium, LCK 308 A; 2/3

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## Pictograms:







#### **Hazard statements**

H290 May be corrosive to metals.

H330 Fatal if inhaled.
H301 Toxic if swallowed.
H311 Toxic in contact with skin.

H314 Causes severe skin burns and eye damage.

H400 Very toxic to aquatic life.

H411 Toxic to aquatic life with long lasting effects.

## **Precautionary statements**

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

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P310 Immediately call a POISON CENTER/doctor.

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.

P391 Collect spillage.

## Special labelling of certain mixtures

EUH032 Contact with acids liberates very toxic gas.

#### Additional advice on labelling

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

#### 2.3. Other hazards

None known.

## **SECTION 3: Composition/information on ingredients**

#### 3.2. Mixtures

# **Hazardous components**

CAS No	Chemical name					
	EC No	Index No	REACH	No		
	GHS Classification	•	•			
7732-18-5	Water				>95 %	
	231-791-2					
151-50-8	Potassium cyanide					
	205-792-3	006-007-00-5				
	Acute Tox. 1, Acute Tox. 2, Acute Tox. 2, STOT SE 1, STOT RE 1, Aquatic Acute 1 (M-Factor = 10), Aquatic Chronic 1 (M-Factor = 10); H310 H330 H300 H370 H372 H400 H410 EUH032					
1310-58-3	potassium hydroxide; caustic potash					
	215-181-3	019-002-00-8				
	Acute Tox. 4, Skin Corr. 1A	; H302 H314	-			

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

according to Regulation (EC) No 1907/2006

#### LCK 308 Cadmium, LCK 308 A; 2/3

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#### **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 eves

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, Dizziness, Nausea

#### 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

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.

#### 6.2. Environmental precautions

Do not flush into surface water or sanitary sewer system.

## 6.3. Methods and material for containment and cleaning up

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal.

#### 6.4. Reference to other sections

13. Disposal considerations

#### **SECTION 7: Handling and storage**

# 7.1. Precautions for safe handling

according to Regulation (EC) No 1907/2006

#### LCK 308 Cadmium, LCK 308 A; 2/3

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#### Advice on safe handling

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

#### 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.

Storage temperature: 2-8 °C

#### Further information on storage conditions

Keep locked up or in an area accessible only to qualified or authorised persons.

## 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
151-50-8	Potassium cyanide (as cyanide)		5		TWA (8 h)	WEL
1310-58-3	Potassium hydroxide	-	2		STEL (15 min)	WEL

#### Additional advice on limit values

None known.

# 8.2. Exposure controls

#### Appropriate engineering 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.

# Eye/face protection

Safety glasses with side-shields

## **Hand protection**

Use barrier skin cream.

The protective gloves to be used must comply with the specifications of EC directive 2016/425/EC and the resultant standard EN374. 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

# 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.

#### **SECTION 9: Physical and chemical properties**

## 9.1. Information on basic physical and chemical properties

Physical state: liquid
Colour: colourless
Odour: unpleasant

pH-Value (at 20 °C):

according to Regulation (EC) No 1907/2006

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# 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: not applicable
Gas: not applicable

**Explosive properties** 

not applicable

Lower explosion limits:

Upper explosion limits:

Ignition temperature:

not applicable

not applicable

**Auto-ignition temperature** 

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

**Oxidizing properties** 

not applicable

Vapour pressure:

Density (at 20 °C):

Bulk density:

Water solubility:

(at 20 °C)

soluble

soluble

Solubility in other solvents

no data available

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

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.

according to Regulation (EC) No 1907/2006

## LCK 308 Cadmium, LCK 308 A; 2/3

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# 10.3. Possibility of hazardous reactions

Hazardous polymerisation does not occur.

#### 10.4. Conditions to avoid

Protect from moisture.

#### 10.5. Incompatible materials

Acids

#### 10.6. Hazardous decomposition products

Hydrogen cyanide (hydrocyanic acid)

## **SECTION 11: Toxicological information**

## 11.1. Information on toxicological effects

#### Toxicocinetics, metabolism and distribution

No toxicology information is available.

#### **Acute toxicity**

Fatal if inhaled.

Toxic if swallowed.

Toxic in contact with skin.

CAS No	Chemical name								
	Exposure route	Dose		Species	Source	Method			
151-50-8	Potassium cyanide								
	oral	LD50	5 mg/kg	rat					
	dermal	LD50 mg/kg	14,29	rabbits	ECHA				
	inhalation (4 h) vapour	LC50 mg/l	0,051	rat					
	inhalation (4 h) aerosol	LC50 mg/l	0,051	rat					
1310-58-3	potassium hydroxide; caustic potash								
	oral	LD50 mg/kg	333	Rat	Merck				

#### Irritation and corrosivity

Causes severe skin burns and eye damage.

## Sensitising effects

Based on available data, the classification criteria are not met.

#### Carcinogenic/mutagenic/toxic effects for reproduction

Based on available data, the classification criteria are not met.

#### STOT-single exposure

Based on available data, the classification criteria are not met.

#### STOT-repeated exposure

Based on available data, the classification criteria are not met.

#### Aspiration hazard

Based on available data, the classification criteria are not met.

# Specific effects in experiment on an animal

No toxicology information is available.

## **Further information**

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

according to Regulation (EC) No 1907/2006

## LCK 308 Cadmium, LCK 308 A; 2/3

Revision date: 19.09.2019 Product code: LCK308-2 Page 7 of 10

## **SECTION 12: Ecological information**

#### 12.1. Toxicity

No information on ecology is available.

CAS No	Chemical name	Chemical name									
	Aquatic toxicity	Dose		[h]   [d]	Species		Source	Method			
151-50-8	Potassium cyanide										
	Acute fish toxicity	LC50 mg/l	0,068	96 h							
	Acute crustacea toxicity	EC50 mg/l	0,25	48 h							
1310-58-3	potassium hydroxide; caustic potash										
	Acute fish toxicity	LC50	80 mg/l	96 h	Gambusia affinis		IUCLID				

#### 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

Discharge into the environment must be avoided.

## **SECTION 13: Disposal considerations**

## 13.1. Waste treatment methods

#### 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):

according to Regulation (EC) No 1907/2006

# LCK 308 Cadmium, LCK 308 A; 2/3 Product code: LCK308-2 Page 8 of 10

14.4. Packing group:IIHazard 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

Revision date: 19.09.2019

# Marine transport (IMDG)

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

14.3. Transport hazard class(es):914.4. Packing group:IIHazard label:9



Marine pollutant:

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

# Air transport (ICAO-TI/IATA-DGR)

14.1. UN number:UN 331614.2. UN proper shipping name:CHEMICAL KIT14.3. Transport hazard class(es):9

14.4. Packing group:
Hazard label:
9



Special Provisions:

Limited quantity Passenger:

Passenger LQ:

Excepted quantity:

A44 A163

1 kg

Y960

Excepted 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

according to Regulation (EC) No 1907/2006

LCK 308 Cadmium, LCK 308 A; 2/3

Revision date: 19.09.2019 Product code: LCK308-2 Page 9 of 10

ENVIRONMENTALLY HAZARDOUS: yes

\*2

Danger releasing substance: Potassium cyanide

potassium hydroxide; caustic potash

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

Other applicable information

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

**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). Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or

nursing mothers.

Water contaminating class (D): 3 - highly 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 Date 19.09.2019

Safety datasheet sections which have been updated: 8, 11, 15, 16

Revision Date 09.03.2017

Safety datasheet sections which have been updated: 14

Revision: 15.02.2016

This data sheet contains changes from the previous version in section(s): 2, 4, 11

Revision: 09.10.2014

This data sheet contains changes from the previous version in section(s): 2

Revision: 16.09.2014

This data sheet contains changes from the previous version in section(s): 7.2

Revision: 25.03.2014

This data sheet contains changes from the previous version in section(s): 4-16

Classification for mixtures and used evaluation method according to Regulation (EC) No. 1272/2008 [CLP]

Classification	Classification procedure
Met. Corr. 1; H290	On basis of test data
Acute Tox. 1; H330	Calculation method
Acute Tox. 3; H301	Calculation method
Acute Tox. 3; H311	Calculation method
Skin Corr. 1B; H314	Calculation method
Aquatic Chronic 2; H411	Calculation method

Relevant H and EUH statements (number and full text)

H290 May be corrosive to metals.

according to Regulation (EC) No 1907/2006

	3 3 (1) 1 1001,200				
LCK 308 Cadmium, LCK 308 A; 2/3					
Revision date: 19.09.2019	Product code: LCK308-2 Page 10	of 10			
H300	Fatal if swallowed.				
H301	Toxic if swallowed.				
H302	Harmful if swallowed.				
H310	Fatal in contact with skin.				
H311	Toxic in contact with skin.				
H314	Causes severe skin burns and eye damage.				
H330	Fatal if inhaled.				
H370	Causes damage to organs.				
H372	Causes damage to organs through prolonged or repeated exposure.				
H400	Very toxic to aquatic life.				
H410	Very toxic to aquatic life with long lasting effects.				
H411	Toxic to aquatic life with long lasting effects.				
EUH032	Contact with acids liberates very toxic gas.				
Further Information					
	ased on the present level of our knowledge. It does not, however, give assurance of nd 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.)

according to Regulation (EC) No 1907/2006

## LCK 308 Cadmium, LCK 308 B; 3/3

Revision date: 19.09.2019 Product code: LCK308-3 Page 1 of 11

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

#### 1.1. Product identifier

LCK 308 Cadmium, LCK 308 B; 3/3

## 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 - 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:

Acute toxicity: Acute Tox. 4
Acute toxicity: Acute Tox. 4
Acute toxicity: Acute Tox. 4
Skin corrosion/irritation: Skin Irrit. 2

Serious eye damage/eye irritation: Eye Irrit. 2 Respiratory or skin sensitisation: Skin Sens. 1

Germ cell mutagenicity: Muta. 2 Carcinogenicity: Carc. 1B

Specific target organ toxicity - single exposure: STOT SE 2 Specific target organ toxicity - single exposure: STOT SE 3

Hazard Statements: Harmful if swallowed. Harmful in contact with skin.

Harmful if inhaled. Causes skin irritation.

Causes serious eye irritation.

May cause an allergic skin reaction. Suspected of causing genetic defects.

May cause cancer.

May cause damage to organs.

according to Regulation (EC) No 1907/2006

# LCK 308 Cadmium, LCK 308 B; 3/3

Revision date: 19.09.2019 Product code: LCK308-3 Page 2 of 11

May cause respiratory irritation.

# 2.2. Label elements

## Regulation (EC) No. 1272/2008

#### Hazard components for labelling

formaldehyde ... %

methanol

Signal word: Danger

Pictograms:





#### **Hazard statements**

H302+H312+H332 Harmful if swallowed, in contact with skin or if inhaled.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction. H319 Causes serious eye irritation. H335 May cause respiratory irritation. H341 Suspected of causing genetic defects. H350 May cause cancer.

H371 May cause damage to organs.

#### **Precautionary statements**

Obtain special instructions before use. P201

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

P281 Use personal protective equipment as required.

P308+P313 IF exposed or concerned: Get medical advice/attention.

P363 Wash contaminated clothing before reuse.

#### Additional advice on labelling

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

## 2.3. Other hazards

None known.

# **SECTION 3: Composition/information on ingredients**

## 3.2. Mixtures

according to Regulation (EC) No 1907/2006

## LCK 308 Cadmium, LCK 308 B; 3/3

Revision date: 19.09.2019 Product code: LCK308-3 Page 3 of 11

#### **Hazardous components**

Chemical name			Quantity
EC No	Index No	REACH No	
GHS Classification	•		
Water			>70 %
231-791-2			
	·		
formaldehyde %			<13 %
200-001-8	605-001-00-5		
1		Skin Corr. 1B, Skin Sens. 1; H350	
methanol			<4 %
200-659-6	603-001-00-X		
Flam. Liq. 2, Acute Tox. 3, Acute	e Tox. 3, Acute Tox. 3, STOT	SE 1; H225 H331 H311 H301 H370	
zinc sulphate, heptahydrate			0,2 %
231-793-3	030-006-00-9		
Acute Tox. 4, Eye Dam. 1, Aqua	atic Acute 1, Aquatic Chronic	1; H302 H318 H400 H410	
	EC No GHS Classification Water 231-791-2  formaldehyde % 200-001-8 Carc. 1B, Muta. 2, Acute Tox. 3, H341 H331 H311 H301 H314 H methanol 200-659-6 Flam. Liq. 2, Acute Tox. 3, Acute zinc sulphate, heptahydrate 231-793-3	EC No GHS Classification  Water  231-791-2  formaldehyde %  200-001-8  Carc. 1B, Muta. 2, Acute Tox. 3, Acute Tox. 3, Acute Tox. 3, SH341 H331 H311 H301 H314 H317  methanol  200-659-6  flam. Liq. 2, Acute Tox. 3, Acute Tox. 3, Acute Tox. 3, STOT szinc sulphate, heptahydrate  231-793-3  030-006-00-9	EC No GHS Classification  Water  231-791-2  formaldehyde %  200-001-8  Carc. 1B, Muta. 2, Acute Tox. 3, Acute Tox. 3, Acute Tox. 3, Skin Corr. 1B, Skin Sens. 1; H350 H341 H331 H311 H301 H314 H317  methanol  200-659-6  formaldehyde %  605-001-00-5  Carc. 1B, Muta. 2, Acute Tox. 3, Acute Tox. 3, Skin Corr. 1B, Skin Sens. 1; H350 H341 H331 H311 H301 H314 H317  methanol  200-659-6  flam. Liq. 2, Acute Tox. 3, Acute Tox. 3, Acute Tox. 3, STOT SE 1; H225 H331 H311 H301 H370  zinc sulphate, heptahydrate

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, Allergic reactions, Cough, Shortness of breath, Dizziness, headache

#### 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

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.

according to Regulation (EC) No 1907/2006

## LCK 308 Cadmium, LCK 308 B; 3/3

Revision date: 19.09.2019 Product code: LCK308-3 Page 4 of 11

#### 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.

#### 6.2. Environmental precautions

Do not flush into surface water or sanitary sewer system.

## 6.3. Methods and material for containment and cleaning up

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal.

#### 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.

# 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.

Storage temperature: 2-8 °C

Keep away from heat and sources of ignition.

# Hints on joint storage

Do not store near combustible materials.

#### 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
50-00-0	Formaldehyde	2	2.5		TWA (8 h)	WEL
		2	2.5		STEL (15 min)	WEL
67-56-1	Methanol	200	266		TWA (8 h)	WEL
		250	333		STEL (15 min)	WEL

#### Additional advice on limit values

None known.

#### 8.2. Exposure controls

# Appropriate engineering controls

The type of protective equipment must be selected according to the concentration and amount of the

according to Regulation (EC) No 1907/2006

## LCK 308 Cadmium, LCK 308 B; 3/3

Revision date: 19.09.2019 Product code: LCK308-3 Page 5 of 11

dangerous substance at the specific workplace.

#### Protective and hygiene measures

Wash hands before breaks and at the end of workday.

#### Eye/face protection

Safety glasses with side-shields

#### Hand protection

Use barrier skin cream.

The protective gloves to be used must comply with the specifications of EC directive 2016/425/EC and the resultant standard EN374.

In case of full contact:

Glove material: Nitrile rubber Layer thickness: 0,11 mm Break through time: >480 min In case of contact through splashing: Glove material: Nitrile rubber Layer thickness: 0,11 mm Break through time: >480 min

#### 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.

## **SECTION 9: Physical and chemical properties**

# 9.1. Information on basic physical and chemical properties

Physical state: liquid
Colour: colourless
Odour: not significant

pH-Value (at 20 °C): 3,4

#### Changes in the physical state

Melting point:

In data available
Initial boiling point and boiling range:

Sublimation point:

Softening point:

Pour point:

Flash point:

no data available
no data available
not applicable
not applicable
rot applicable
78 °C

**Flammability** 

Solid: no data available
Gas: no data available

**Explosive properties** 

no data available

Lower explosion limits:

Upper explosion limits:

Ignition temperature:

no data available

no data available

**Auto-ignition temperature** 

Solid: no data available
Gas: no data available
Decomposition temperature: no data available

according to Regulation (EC) No 1907/2006

LCK 308 Cadmium, L	_CK 308 B: 3/3
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Revision date: 19.09.2019 Product code: LCK308-3 Page 6 of 11

## Oxidizing properties

no data available

Vapour pressure:

Density (at 20 °C):

Bulk density:

Water solubility:

(at 20 °C)

soluble

(at 20 °C)

#### Solubility in other solvents

no data available

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

To avoid thermal decomposition, do not overheat.

#### 10.4. Conditions to avoid

Heat, flames and sparks.

#### 10.5. Incompatible materials

None known.

## 10.6. Hazardous decomposition products

No decomposition if stored and applied as directed.

# **SECTION 11: Toxicological information**

# 11.1. Information on toxicological effects

## Toxicocinetics, metabolism and distribution

No toxicology information is available.

#### **Acute toxicity**

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

according to Regulation (EC) No 1907/2006

## LCK 308 Cadmium, LCK 308 B; 3/3

Revision date: 19.09.2019 Product code: LCK308-3 Page 7 of 11

CAS No	Chemical name								
	Exposure route Dose Spec		Species	Source	Method				
50-00-0	formaldehyde %								
	oral	ATE mg/kg	100						
	dermal	ATE mg/kg	300						
	inhalation (4 h) vapour	LC50	250 mg/l	rat					
	inhalation aerosol	ATE	0,5 mg/l						
67-56-1	methanol	methanol							
	oral	LD50 mg/kg	300	Humans					
	dermal	LD50 mg/kg	1000	Humans					
	inhalation (4 h) vapour	LC50	10 mg/l	Humans					
	inhalation aerosol	ATE	0,5 mg/l						
7446-20-0	zinc sulphate, heptahydrate								
	oral	LD50 mg/kg	1260	@N11.0018550	RTECS				

## Irritation and corrosivity

May cause eye and skin irritation.

# Sensitising effects

May cause sensitisation by skin contact. (formaldehyde ... %)

## Carcinogenic/mutagenic/toxic effects for reproduction

May cause cancer. (formaldehyde ... %)

H341 - Suspected of causing genetic defects. (formaldehyde ... %)

#### STOT-single exposure

The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with respiratory tract irritation.

H371 - May cause damage to organs.

#### 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 toxicology information is 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.

according to Regulation (EC) No 1907/2006

## LCK 308 Cadmium, LCK 308 B; 3/3

Revision date: 19.09.2019 Product code: LCK308-3 Page 8 of 11

CAS No	Chemical name						
	Aquatic toxicity	Dose		[h]   [d]	Species	Source	Method
67-56-1	methanol						
	Acute fish toxicity	LC50 mg/l	15400		Lepomis macrochirus (Bluegill sunfish)		
	Acute algae toxicity	ErC50 mg/l	22000		Pseudokirchneriella subcapitata (green algae)		
	Acute crustacea toxicity	EC50 mg/l	24500	48 h	Crustaceans		
7446-20-0	2 zinc sulphate, heptahydrate						
	Acute fish toxicity	LC50	0,11 mg/l	1	Oncorhynchus mykiss (rainbow trout)	Ecotox	

# 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.

#### Partition coefficient n-octanol/water

CAS No	Chemical name		Log Pow
67-56-1	methanol		-0,77

#### 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 known effect.

# **SECTION 13: Disposal considerations**

## 13.1. Waste treatment methods

#### 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

according to Regulation (EC) No 1907/2006

# LCK 308 Cadmium, LCK 308 B; 3/3

Revision date: 19.09.2019 Product code: LCK308-3 Page 9 of 11

14.2. UN proper shipping name: Chemical kit

14.3. Transport hazard class(es):914.4. Packing group:IIHazard 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)

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

14.3. Transport hazard class(es):914.4. Packing group:IIHazard label:9



F-A, S-P

Marine pollutant:

Special Provisions:

Limited quantity:

Excepted quantity:

Sp340

Sp340

Air transport (ICAO-TI/IATA-DGR)

EmS:

14.1. UN number: UN 3316
14.2. UN proper shipping name: CHEMICAL KIT

14.3. Transport hazard class(es):914.4. Packing group:IIHazard label:9



Special Provisions:

Limited quantity Passenger:

Passenger LQ:

Excepted quantity:

A44 A163

1 kg

Y960

Excepted quantity:

E0

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

according to Regulation (EC) No 1907/2006

LCK 308 Cadmium, LCK 308 B; 3/3

Revision date: 19.09.2019 Product code: LCK308-3 Page 10 of 11

## 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

#### Other applicable information

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

## **SECTION 15: Regulatory information**

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

#### **EU** regulatory information

Restrictions on use (REACH, annex XVII):

Entry 28: formaldehyde ... %

Entry 69: methanol

#### National regulatory information

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

work protection guideline' (94/33/EC). Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or

nursing mothers.

Water contaminating class (D): 2 - clearly 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 Date 19.09.2019

Safety datasheet sections which have been updated: 8, 15, 16

Revision Date 09.03.2017

Safety datasheet sections which have been updated: 14

Revision: 15,03.2016

This data sheet contains changes from the previous version in section(s): 2, 11

Revision: 04.11.2015

This data sheet contains changes from the previous version in section(s): 2

Revision: 09.10.2014

This data sheet contains changes from the previous version in section(s): 2

Revision: 16.09.2014

This data sheet contains changes from the previous version in section(s): 7.2

Revision: 25.03.2014

This data sheet contains changes from the previous version in section(s): 4-16

according to Regulation (EC) No 1907/2006

## LCK 308 Cadmium, LCK 308 B; 3/3

Revision date: 19.09.2019 Product code: LCK308-3 Page 11 of 11

#### Classification for mixtures and used evaluation method according to Regulation (EC) No. 1272/2008 [CLP]

Classification	Classification procedure	
Acute Tox. 4; H302	Calculation method	
Acute Tox. 4; H312	Calculation method	
Acute Tox. 4; H332	Calculation method	
Skin Irrit. 2; H315	Calculation method	
Eye Irrit. 2; H319	Calculation method	
Skin Sens. 1; H317	Calculation method	
Muta. 2; H341	Calculation method	
Carc. 1B; H350	Calculation method	
STOT SE 2; H371	Calculation method	
STOT SE 3; H335	Calculation method	

#### Relevant H and EUH statements (number and full text)

H225	Highly flammable liquid and vapour.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H302+H312+H332	Harmful if swallowed, in contact with skin or if inhaled.
H311	Toxic in contact with skin.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.
 H318 Causes serious eye damage.
 H319 Causes serious eye irritation.

H331 Toxic if inhaled. H332 Harmful if inhaled.

H335 May cause respiratory irritation.
H341 Suspected of causing genetic defects.

H350 May cause cancer.
H370 Causes damage to organs.
H371 May cause damage to organs.
H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

#### **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.)