according to Regulation (EC) No 1907/2006

LCK 306 Blei/Lead/Plomb, Sample cuvette; 1/4

Revision date: 19.09.2019 Product code: LCK306-1 Page 1 of 9

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

1.1. Product identifier

LCK 306 Blei/Lead/Plomb, Sample cuvette; 1/4

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. 1
Acute toxicity: Acute Tox. 1
Acute toxicity: Acute Tox. 2

Hazardous to the aquatic environment: Aquatic Acute 1 Hazardous to the aquatic environment: Aquatic Chronic 1

Hazard Statements:
Fatal in contact with skin.

Fatal if inhaled.
Fatal if swallowed.
Very toxic to aquatic life.

very toxic to aquatic life.

Very toxic to aquatic life with long lasting effects.

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

2.2. Label elements

Regulation (EC) No. 1272/2008

Hazard components for labelling

Potassium cyanide

Signal word: Danger

according to Regulation (EC) No 1907/2006

LCK 306 Blei/Lead/Plomb, Sample cuvette; 1/4

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Pictograms:





Hazard statements

H300 Fatal if swallowed. H310 Fatal in contact with skin.

H330 Fatal if inhaled.

H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements

P273 Avoid release to the environment.

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

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

P302+P352 IF ON SKIN: Wash with plenty of water.

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

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous components

FO.N.		Chemical name		
EC No	Index No	REACH No		
GHS Classification				
Potassium cyanide			60-70 %	
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				
D(-)-Mannitol			30-40 %	
200-711-8				
4-(2-PYRIDYLAZO)RESORCINOL	MONOSODIUM SALT MONOHYDRA	ATE	< 1%	
236-339-8				
Skin Irrit. 2, Eye Irrit. 2, STOT SE 3; H315 H319 H335				
F 2 / 1 [Potassium cyanide 205-792-3 Acute Tox. 1, Acute Tox. 2, Acute To 10), Aquatic Chronic 1 (M-Factor = 10)	Potassium cyanide 205-792-3 Acute Tox. 1, Acute Tox. 2, Acute Tox. 2, STOT SE 1, STOT RE 1, Aqua 10), Aquatic Chronic 1 (M-Factor = 10); H310 H330 H300 H370 H372 H- D(-)-Mannitol 200-711-8 4-(2-PYRIDYLAZO)RESORCINOL MONOSODIUM SALT MONOHYDRA 236-339-8	Potassium cyanide 205-792-3 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 D(-)-Mannitol 200-711-8 4-(2-PYRIDYLAZO)RESORCINOL MONOSODIUM SALT MONOHYDRATE	

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 all contaminated clothing immediately.

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

After inhalation

Move to fresh air.

according to Regulation (EC) No 1907/2006

LCK 306 Blei/Lead/Plomb, Sample cuvette; 1/4

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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.

Consult a physician.

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.

Call a physician immediately. Show this safety data sheet to the doctor in attendance.

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. The product itself does not burn.

5.2. Special hazards arising from the substance or mixture

Fire may liberate hazardous vapours.

5.3. Advice for firefighters

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.

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

Sweep up or vacuum up spillage and collect in suitable container for disposal.

6.4. Reference to other sections

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

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

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

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

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

Keep at temperatures between 15 and 25 °C.

according to Regulation (EC) No 1907/2006

LCK 306 Blei/Lead/Plomb, Sample cuvette; 1/4

Revision date: 19.09.2019 Product code: LCK306-1 Page 4 of 9

Further information on storage conditions

Accessible only for authorized 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

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 after work.

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 0.40 mm, Breakthrough time: > 30 min

Skin protection

Remove and wash contaminated clothing before re-use.

Respiratory protection

Breathing apparatus only if aerosol or dust is formed.

Recommended Filter type: ABEK-filter

Environmental exposure controls

Do not flush into surface water or sanitary sewer system.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: lyophilised cake

Colour: orange odourless

pH-Value (at 20 °C):

Changes in the physical state

Melting point:

Initial boiling point and boiling range:

Sublimation point:

Softening point:

Pour point:

not applicable
not applicable
no data available
not applicable
no data available

according to Regulation (EC) No 1907/2006

	LCK 306 Blei/Lead/Plomb, Sample cuvette; 1/4	
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Flash point: not applicable
Sustaining combustion: No data available

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:
Gas:

Decomposition temperature:

not applicable
not applicable

Oxidizing properties

no data available

Vapour pressure:no data availableVapour pressure:no data availableDensity (at 20 °C):not applicableBulk density:no data availableWater solubility:completely soluble

(at 20 °C)

Solubility in other solvents

no data available

Partition coefficient: not applicable Viscosity / dynamic: not applicable Viscosity / kinematic: not applicable Flow time: not applicable Vapour density: not applicable Evaporation rate: no data available Solvent separation test: not applicable Solvent content: not applicable

9.2. Other information

Solid content: no data available

no data available

SECTION 10: Stability and reactivity

10.1. Reactivity

Corrosive to metals

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

To avoid thermal decomposition, do not overheat.

according to Regulation (EC) No 1907/2006

LCK 306 Blei/Lead/Plomb, Sample cuvette; 1/4

Revision date: 19.09.2019 Product code: LCK306-1 Page 6 of 9

10.5. Incompatible materials

Reacts violently with water.

Thiocyanates can develop poisonous gas in contact with strong acids.

10.6. Hazardous decomposition products

Hydrogen cyanide (hydrocyanic acid)

Further information

very reactive

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

Contact with acids liberates very toxic gas.

Very toxic by inhalation, in contact with skin and if swallowed.

CAS No	Chemical name	Chemical name						
	Exposure route	Dose		Species	Source	Method		
151-50-8	Potassium cyanide	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				
69-65-8	D(-)-Mannitol							
	oral	LD50 mg/kg	135000	Ratte				

Irritation and corrosivity

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

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

Potassium cyanide: LD50/oral/rat = 5 mg/kg

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

May cause long-term adverse effects in the aquatic environment.

Do not flush into surface water or sanitary sewer system.

according to Regulation (EC) No 1907/2006

LCK 306 Blei/Lead/Plomb, Sample cuvette; 1/4

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CAS No	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		<i>/</i> ///////////////////////////////////	

12.2. Persistence and degradability

No data is available on the product itself.

12.3. Bioaccumulative potential

no data available

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

Disposal recommendations

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

In accordance with local and national regulations.

List of Wastes Code - residues/unused products

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

6.1

SECTION 14: Transport information

Land transport (ADR/RID)

UN 1680 14.1. UN number:

POTASSIUM CYANIDE, SOLID 14.2. UN proper shipping name:

14.3. Transport hazard class(es): 14.4. Packing group: Hazard label: 6.1



Classification code: T5 Limited quantity: 0 Transport category: 1 Hazard No: 66 Tunnel restriction code: C/F

according to Regulation (EC) No 1907/2006

LCK 306 Blei/Lead/Plomb, Sample cuvette; 1/4

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Other applicable information (land transport)

Excepted Quantities: E5

Inland waterways transport (ADN)

Other applicable information (inland waterways transport)

Not tested

Marine transport (IMDG)

14.1. UN number: UN 1680

14.2. UN proper shipping name: POTASSIUM CYANIDE, SOLID

14.3. Transport hazard class(es):6.114.4. Packing group:IHazard label:6.1



Marine pollutant: P
Special Provisions: Limited quantity: 0
EmS: F-A, S-A

Other applicable information (marine transport)

Excepted Quantities: E5

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number: UN 1680

14.2. UN proper shipping name: POTASSIUM CYANIDE, SOLID

14.3. Transport hazard class(es):6.114.4. Packing group:IHazard label:6.1



Limited quantity Passenger: Forbidden

IATA-packing instructions - Passenger:666IATA-max. quantity - Passenger:5 kgIATA-packing instructions - Cargo:673IATA-max. quantity - Cargo:50 kg

Other applicable information (air transport)

Excepted Quantities: E5 Passenger-LQ: Forbidden

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: yes



Danger releasing substance: Potassium cyanide

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

according to Regulation (EC) No 1907/2006

LCK 306 Blei/Lead/Plomb, Sample cuvette; 1/4

Revision date: 19.09.2019 Product code: LCK306-1 Page 9 of 9

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: 2, 11, 15, 16

Revision Date 27.04.2017

Safety datasheet sections which have been updated: 2, 9, 15

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

Classification	Classification procedure
Acute Tox. 1; H310	Calculation method
Acute Tox. 1; H330	Calculation method
Acute Tox. 2; H300	Calculation method
Aquatic Acute 1; H400	Calculation method
Aquatic Chronic 1; H410	Calculation method

Relevant H and EUH statements (number and full text)

H300	Fatal if swallowed.
H310	Fatal in contact with skin.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H335	May cause respiratory irritation.
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.
EUH032	Contact with acids liberates very toxic gas.

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.)

according to Regulation (EC) No 1907/2006

LCK306 Blei/Lead/Plomb, LCK 306 A; 2/4

Revision date: 19.09.2019 Product code: LCK306-2 Page 1 of 7

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

1.1. Product identifier

LCK306 Blei/Lead/Plomb, LCK 306 A; 2/4

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

Serious eye damage/eye irritation: Eye Irrit. 2

Hazard Statements: Harmful if swallowed. Causes serious eye irritation.

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

2.2. Label elements

Regulation (EC) No. 1272/2008

Signal word: Warning

Pictograms:



Hazard statements

H302 Harmful if swallowed.
H319 Causes serious eye irritation.

according to Regulation (EC) No 1907/2006

LCK306 Blei/Lead/Plomb, LCK 306 A; 2/4

Revision date: 19.09.2019 Product code: LCK306-2 Page 2 of 7

Precautionary statements

P280 Wear protective gloves/protective clothing/eye protection/face protection.
P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.

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

None known.

SECTION 3: Composition/information on ingredients

3.1. Substances

Hazardous components

CAS No	Chemical name			Quantity	
	EC No	Index No		REACH No	
	GHS Classification				
54-21-7	Sodium salicylate			100%	
	200-198-0				
	Acute Tox. 4, Eye Irrit. 2; H302 H319				

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 all contaminated clothing immediately.

After inhalation

Move to fresh air.

After contact with skin

Wash off immediately with plenty of water. If skin irritation persists, call a physician.

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. Consult a physician.

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

Health injuries are not known or expected under normal use.

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. The product itself does not burn.

5.2. Special hazards arising from the substance or mixture

Fire may liberate hazardous vapours.

according to Regulation (EC) No 1907/2006

LCK306 Blei/Lead/Plomb, LCK 306 A; 2/4

Revision date: 19.09.2019 Product code: LCK306-2 Page 3 of 7

5.3. Advice for firefighters

In the event of fire, wear self-contained breathing apparatus. Use personal protective equipment.

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

Sweep up or vacuum up spillage and collect in suitable container 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 in a dry, cool place.

7.3. Specific end use(s)

Reagent for analysis

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Additional advice on limit values

None known.

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 after work.

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 0.40 mm, Breakthrough time: > 30 min

Skin protection

Remove and wash contaminated clothing before re-use.

according to Regulation (EC) No 1907/2006

LCK306 Blei/Lead/Plomb, LCK 306 A; 2/4

Revision date: 19.09.2019 Product code: LCK306-2 Page 4 of 7

Respiratory protection

Breathing apparatus only if aerosol or dust is formed.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: powder
Colour: white
Odour: odourless

pH-Value (at 20 °C): 6,2

Changes in the physical state

Melting point:

Initial boiling point and boiling range:

Sublimation point:

Softening point:

Pour point:

Plash point:

Plash point:

No data available

not applicable

no data available

not applicable

not applicable

No data available

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

Oxidizing properties

no data available

Vapour pressure:no data availableVapour pressure:no data availableDensity:no data availableBulk density:no data availableWater solubility:1000 g/L

(at 20 °C)

Solubility in other solvents

no data available

Partition coefficient:

Viscosity / dynamic:

not applicable
not applicable
viscosity / kinematic:

not applicable
not applicable
not applicable
not applicable
no data available
Vapour density:

no data available

according to Regulation (EC) No 1907/2006

LCK306 Blei/Lead/Plomb, LCK 306 A; 2/4

Revision date: 19.09.2019 Product code: LCK306-2 Page 5 of 7

Evaporation rate:

Solvent separation test:

no data available

solvent content:

no data available

no data available

9.2. Other information

Solid content: no data available

no data available

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

To avoid thermal decomposition, do not overheat.

10.5. Incompatible materials

This information is not available.

10.6. Hazardous decomposition products

No decomposition if stored and applied as directed.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

Harmful if swallowed.

CAS No	Chemical name					
	Exposure route	Dose	Species	Source	Method	
54-21-7	Sodium salicylate					
		LD50 930 mg/kg	Ratte	RTECS		

Irritation and corrosivity

Causes serious eye irritation.

Skin corrosion/irritation: Based on available data, the classification criteria are not met.

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 data is available on the product itself.

according to Regulation (EC) No 1907/2006

LCK306 Blei/Lead/Plomb, LCK 306 A; 2/4

Revision date: 19.09.2019 Product code: LCK306-2 Page 6 of 7

SECTION 12: Ecological information

12.1. Toxicity

No data is available on the product itself.

Do not flush into surface water or sanitary sewer system.

CAS No	Chemical name						
	Aquatic toxicity	Dose	[h] [d] Species	Source	Method		
54-21-7	Sodium salicylate	odium salicylate					
	Acute fish toxicity	LC50 1760 mg/l	96 h				

12.2. Persistence and degradability

No data is available on the product itself.

12.3. Bioaccumulative potential

no data available

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

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

In accordance with local and national regulations.

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

SECTION 14: Transport information

Land transport (ADR/RID)

Other applicable information (land transport)

Not subject to transport regulations.

Inland waterways transport (ADN)

Other applicable information (inland waterways transport)

Not tested

Marine transport (IMDG)

Other applicable information (marine transport)

Not subject to transport regulations.

Air transport (ICAO-TI/IATA-DGR)

according to Regulation (EC) No 1907/2006

LCK306 Blei/Lead/Plomb, LCK 306 A; 2/4

Revision date: 19.09.2019 Product code: LCK306-2 Page 7 of 7

Other applicable information (air transport)

Not subject to transport regulations.

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

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: 7, 8, 10, 11, 15

Revision Date 27.04.2017

Safety datasheet sections which have been updated: 2, 9, 15

Relevant H and EUH statements (number and full text)

H302 Harmful if swallowed.

H319 Causes serious eye irritation.

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 306 Blei/Lead/Plomb, LCK 306 B; 3/4

Revision date: 03.04.2019 Product code: LCK306-3 Page 1 of 8

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

1.1. Product identifier

LCK 306 Blei/Lead/Plomb, LCK 306 B; 3/4

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

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

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

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

2.2. Label elements

Additional advice on labelling

Not a hazardous substance or mixture according to 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 306 Blei/Lead/Plomb, LCK 306 B; 3/4

Revision date: 03.04.2019 Product code: LCK306-3 Page 2 of 8

Hazardous components

CAS No	Chemical name				
	EC No	Index No	REACH No		
	GHS Classification	•			
7732-18-5	Water			80-90 %	
	231-791-2				
7447-40-7	Potassium chloride			1-10 %	
	231-211-8				
69-65-8	D(-)-Mannitol			1-10 %	
	200-711-8				
1330-43-4	disodium tetraborate, anhydrous;	poric acid, disodium salt		< 2,5 %	
	215-540-4	005-011-00-4			
	Repr. 1B; H360FD				
10043-35-3	boric acid			< 2 %	
	233-139-2	005-007-00-2			
	Repr. 1B; H360FD				

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

Further Information

This product contains substances of very high concern (Regulation (EC) No 1907/2006 (REACH), Article 57). disodium tetraborate, anhydrous; boric acid, disodium salt

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Take off all contaminated clothing immediately.

After inhalation

Move to fresh air.

After contact with skin

Wash off immediately with plenty of water.

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.

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

No known effect.

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. The product itself does not burn.

according to Regulation (EC) No 1907/2006

LCK 306 Blei/Lead/Plomb, LCK 306 B; 3/4

Revision date: 03.04.2019 Product code: LCK306-3 Page 3 of 8

5.2. Special hazards arising from the substance or mixture

Fire may liberate hazardous vapours.

5.3. Advice for firefighters

In the event of fire, wear self-contained breathing apparatus. Use personal protective equipment.

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).

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.

Advice on protection against fire and explosion

See also section 5

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep in a dry, cool place.

Hints on joint storage

None known.

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
1330-43-4	Disodium tetraborate, anhydrous	-	1		TWA (8 h)	WEL

Additional advice on limit values

None known.

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

according to Regulation (EC) No 1907/2006

LCK 306 Blei/Lead/Plomb, LCK 306 B; 3/4

Revision date: 03.04.2019 Product code: LCK306-3 Page 4 of 8

dangerous substance at the specific workplace.

Wash hands before breaks and after work.

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

Skin protection

Remove and wash contaminated clothing before re-use.

Respiratory protection

Breathing apparatus only if aerosol or dust is formed. Recommended Filter type: ABEK-filter

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: liquid
Colour: colourless
Odour: odourless

pH-Value (at 20 °C): 6,9

Changes in the physical state

Melting point:

Sublimation point:

Softening point:

Pour point:

not applicable

not applicable

not applicable

not applicable

not applicable

no data available

ro data available

Flash point:

not applicable

No data available

No data available

Flammability

Solid: not applicable
Gas: not applicable

Explosive properties

not applicable

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:no data availableVapour pressure:no data availableDensity (at 20 °C):1,1 g/cm³Bulk density:not applicable

according to Regulation (EC) No 1907/2006

LCK 306 Blei/Lead/Plomb, LCK 306 B; 3/4

Revision date: 03.04.2019 Product code: LCK306-3 Page 5 of 8

no data available

Water solubility: completely soluble

(at 20 °C)

Solubility in other solvents

soluble (Acid)

Partition coefficient:

Viscosity / dynamic:

no data available

Viscosity / kinematic:

no data available

Flow time:

no data available

Vapour density:

no data available

Evaporation rate:

no data available

Solvent separation test:

no data available

Solvent content:

9.2. Other information

Solid content: not applicable

no data available

SECTION 10: Stability and reactivity

10.1. Reactivity

See also section 10.3

10.2. Chemical stability

Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

No dangerous reaction known under conditions of normal use.

10.4. Conditions to avoid

Extremes of temperature and direct sunlight.

10.5. Incompatible materials

None known.

10.6. Hazardous decomposition products

No decomposition if stored and applied as directed.

Further information

None known.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

No data is available on the product itself.

CAS No	Chemical name							
	Exposure route	Dose		Species	Source	Method		
7447-40-7	Potassium chloride							
	oral	LD50 20 mg/kg	2600	Ratte	RTECS			
69-65-8	D(-)-Mannitol							
	oral	LD50 13 mg/kg	35000	Ratte				

according to Regulation (EC) No 1907/2006

LCK 306 Blei/Lead/Plomb, LCK 306 B; 3/4

Revision date: 03.04.2019 Product code: LCK306-3 Page 6 of 8

Irritation and corrosivity

No known effect.

Sensitising effects

Contains no substance or substances classified as sensitising.

Carcinogenic/mutagenic/toxic effects for reproduction

This product contains substances of very high concern (Regulation (EC) No 1907/2006 (REACH), Article 57).

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 data is available on the product itself.

Do not flush into surface water or sanitary sewer system.

CAS No	Chemical name						
	Aquatic toxicity	Dose		[h] [d]	Species	Source	Method
7447-40-7	Potassium chloride						
	Acute fish toxicity	LC50	920 mg/l		Gambusia affinis (Mosquito fish)	IUCLID	
	Acute algae toxicity	ErC50 mg/l	2500		Pseudokirchneriella subcapitata (green algae)	IUCLID	
	Acute crustacea toxicity	EC50	825 mg/l	1	Daphnia magna (Water flea)	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
10043-35-3	boric acid	-1,09

according to Regulation (EC) No 1907/2006

LCK 306 Blei/Lead/Plomb, LCK 306 B; 3/4

Revision date: 03.04.2019 Product code: LCK306-3 Page 7 of 8

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.

Further information

no data available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

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

Dispose of as unused product.

SECTION 14: Transport information

Land transport (ADR/RID)

14.2. UN proper shipping name: Not subject to transport regulations.

Inland waterways transport (ADN)

Other applicable information (inland waterways transport)

Not tested

Marine transport (IMDG)

Other applicable information (marine transport)

Not subject to transport regulations.

Air transport (ICAO-TI/IATA-DGR)

Other applicable information (air transport)

Not subject to transport regulations.

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

14.6. Special precautions for user

no data available

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

not applicable

according to Regulation (EC) No 1907/2006

LCK 306 Blei/Lead/Plomb, LCK 306 B; 3/4

Revision date: 03.04.2019 Product code: LCK306-3 Page 8 of 8

SECTION 15: Regulatory information

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

EU regulatory information

Authorisations (REACH, annex XIV):

Substances of very high concern, SVHC (REACH, article 59): disodium tetraborate, anhydrous; boric acid, disodium salt; boric acid

Restrictions on use (REACH, annex XVII):

Entry 30: disodium tetraborate, anhydrous; boric acid, disodium salt; boric acid

National regulatory information

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: 03.04.2019

Safety datasheet sections which have been updated: 2-15

Revision: 05.05.2017

Safety datasheet sections which have been updated: 2, 9

Revision: 07.04.2016

Safety datasheet sections which have been updated: 3

Revision: 08.10.2015

Safety datasheet sections which have been updated: 3, 9

Relevant H and EUH statements (number and full text)

H360FD May damage fertility. May damage the unborn child.

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.)

according to Regulation (EC) No 1907/2006

LCK 306 Blei/Lead/Plomb, LCK 306 C; 4/4

Revision date: 19.09.2019 Product code: LCK306-4 Page 1 of 8

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

1.1. Product identifier

LCK 306 Blei/Lead/Plomb, LCK 306 C; 4/4

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

Use of the substance/mixture

Reagent for 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

This mixture is not classified as hazardous in accordance with Regulation (EC) No. 1272/2008.

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

2.2. Label elements

Additional advice on labelling

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

2.3. Other hazards

no data available

This mixture contains no substance considered to be very persistent nor very bioaccumulating (vPvB).

SECTION 3: Composition/information on ingredients

3.2. Mixtures

according to Regulation (EC) No 1907/2006

LCK 306 Blei/Lead/Plomb, LCK 306 C; 4/4

Revision date: 19.09.2019 Product code: LCK306-4 Page 2 of 8

Hazardous components

CAS No	Chemical name					
	EC No	Index No	REACH No			
	GHS Classification	•				
7732-18-5	Water			60-70 %		
	231-791-2					
102-71-6	Triethanolamine			20-30 %		
	203-049-8					
-	hydrochloric acid %			< 5 %		
	231-595-7	017-002-01-X				
	Skin Corr. 1B, STOT SE 3; H314 H335					

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.

No hazards which require special first aid measures.

No health threat

No conditions to be specially mentioned.

No special precautions required.

No special handling advice required. No special storage conditions required. No special protective measures against fire required. No special protective equipment required.

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

Immediately flush eye(s) with plenty of water.

If eye irritation persists, consult a specialist.

After ingestion

Clean mouth with water and drink afterwards plenty of water.

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

No known effect.

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.

The product itself does not burn.

according to Regulation (EC) No 1907/2006

LCK 306 Blei/Lead/Plomb, LCK 306 C; 4/4

Revision date: 19.09.2019 Product code: LCK306-4 Page 3 of 8

Unsuitable extinguishing media

No Limit

5.2. Special hazards arising from the substance or mixture

None known. 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 case of respirable dust and/or fumes, use self-contained breathing apparatus and dust impervious protective suit.

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.

For personal protection see section 8.

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

Avoid contact with skin and eyes.

Do not breathe vapours/dust.

Wash thoroughly after handling.

General industrial hygiene practice.

Advice on protection against fire and explosion

See also section 5

Further information on handling

Avoid contact with skin, eyes and clothing.

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.

Hints on joint storage

Avoid contact with skin, eyes and clothing.

Further information on storage conditions

no data available

7.3. Specific end use(s)

no data available Reagent for analysis

SECTION 8: Exposure controls/personal protection

according to Regulation (EC) No 1907/2006

LCK 306 Blei/Lead/Plomb, LCK 306 C; 4/4

Revision date: 19.09.2019 Product code: LCK306-4 Page 4 of 8

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.

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

Wash hands before breaks and after work.

General industrial hygiene practice.

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

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

Skin protection

Avoid contact with skin, eyes and clothing.

Respiratory protection

Provide adequate ventilation.

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: colourless
Odour: odourless

pH-Value (at 20 °C):

Changes in the physical state

Melting point:not applicableInitial boiling point and boiling range:no data availableSublimation point:not applicableSoftening point:not applicablePour point:no data available

according to Regulation (EC) No 1907/2006

	LCK 306 Blei/Lead/Plomb, LCK 306 C; 4/4	
Revision date: 19.09.2019	Product code: LCK306-4	Page 5 of 8
:	no data available	
Flash point:	no data available	
Sustaining combustion:	No data available	
Flammability		
Solid:	not applicable	
Gas:	not applicable	
Explosive properties no data available		
Lower explosion limits:	not applicable	
Upper explosion limits:	not applicable	
Ignition temperature:	no data available	
Auto-ignition temperature		
Solid: Gas:	not applicable no data available	
Decomposition temperature:	no data available	
	no data avallable	
Oxidizing properties no data available		
Vapour pressure:	no data available	
Vapour pressure:	no data available	
Density (at 20 °C): Bulk density:	1,05 g/cm³ not applicable	
Water solubility:	completely soluble	
(at 20 °C)	completely soluble	
Solubility in other solvents soluble (Acid)		
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	
Evaporation rate:	no data available	
Solvent separation test:	no data available	
Solvent content:	no data available	
9.2. Other information		
Solid content:	not applicable	
no data available		

SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reaction known under conditions of normal use.

10.2. Chemical stability

The product is chemically stable.

10.3. Possibility of hazardous reactions

Hazardous polymerisation does not occur.

according to Regulation (EC) No 1907/2006

LCK 306 Blei/Lead/Plomb, LCK 306 C; 4/4

Revision date: 19.09.2019 Product code: LCK306-4 Page 6 of 8

10.4. Conditions to avoid

Extremes of temperature and direct sunlight.

10.5. Incompatible materials

Gives off hydrogen by reaction with metals.

10.6. Hazardous decomposition products

No decomposition if stored and applied as directed.

Further information

Stable under recommended storage conditions.

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	Chemical name							
	Exposure route	Dose	Species	Source	Method				
102-71-6	Triethanolamine								
	oral	LD50 5530 mg/kg	rat						
	dermal	LD50 22500 mg/kg	rabbit						
-	hydrochloric acid %								
	dermal	LD50 >5010 mg/kg							

Irritation and corrosivity

No known effect.

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.

Practical experience

Observations relevant to classification

None known.

Other observations

None known.

according to Regulation (EC) No 1907/2006

LCK 306 Blei/Lead/Plomb, LCK 306 C; 4/4

Revision date: 19.09.2019 Product code: LCK306-4 Page 7 of 8

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. No data is available on the product itself.

CAS No	Chemical name	Chemical name							
	Aquatic toxicity	Dose		[h] [d]	Species		Source	Method	
102-71-6	Triethanolamine	Triethanolamine							
	Acute fish toxicity	LC50 1000 mg/l	450-	96 h					
	Acute crustacea toxicity	EC50	610 mg/l	48 h					
-	hydrochloric acid %	hydrochloric acid %							
	Acute fish toxicity	LC50	862 mg/l	96 h	Leuciscus idus				

12.2. Persistence and degradability

No data is available on the product itself.

12.3. Bioaccumulative potential

no data available

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.

Further information

No known effect.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

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

Dispose of as unused product.

SECTION 14: Transport information

according to Regulation (EC) No 1907/2006

LCK 306 Blei/Lead/Plomb, LCK 306 C; 4/4

Revision date: 19.09.2019 Product code: LCK306-4 Page 8 of 8

Land transport (ADR/RID)

Other applicable information (land transport)

Not subject to transport regulations.

Inland waterways transport (ADN)

Other applicable information (inland waterways transport)

Not tested

Marine transport (IMDG)

Other applicable information (marine transport)

Not subject to transport regulations.

Air transport (ICAO-TI/IATA-DGR)

Other applicable information (air transport)

Not subject to transport regulations.

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS:

14.6. Special precautions for user

no data available

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

no

National regulatory information

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: 2, 15

Revision Date 27.04.2017

Safety datasheet sections which have been updated: 2, 9

Relevant H and EUH statements (number and full text)

H314 Causes severe skin burns and eye damage.

H335 May cause respiratory irritation.

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.)