

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**LCK 387 TOC/COT, Indikatorküvette/Indicator Cuvette; 1/2**

Revision date: 09.01.2017

Product code: LCK387-1

Page 1 of 8

**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1. Product identifier**

LCK 387 TOC/COT, Indikatorküvette/Indicator Cuvette; 1/2

**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 number:**

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

**2.2. Label elements****Additional advice on labelling**

The product is not classified as dangerous according to Regulation (EC) No. 1272/2008.

**2.3. Other hazards**

None known.

**SECTION 3: Composition/information on ingredients****3.2. Mixtures**

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

## LCK 387 TOC/COT, Indikatorküvette/Indicator Cuvette; 1/2

Revision date: 09.01.2017

Product code: LCK387-1

Page 2 of 8

## Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	GHS Classification			
7732-18-5	Water			> 99 %
	231-791-2			
7447-40-7	Potassium chloride			< 1 %
	231-211-8			
1310-73-2	sodium hydroxide; caustic soda			< 0,2 %
	215-185-5	011-002-00-6		
	Skin Corr. 1A; H314			
62625-21-2	Thymolblue Sodium salt			< 1 %
	263-650-6			

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.

**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.

**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

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### LCK 387 TOC/COT, Indikatorküvette/Indicator Cuvette; 1/2

Revision date: 09.01.2017

Product code: LCK387-1

Page 3 of 8

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.

Storage temperature: 2-8 °C

###### **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/m <sup>3</sup>	fibres/ml	Category	Origin
1310-73-2	Sodium hydroxide	-	2		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**

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.

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

**LCK 387 TOC/COT, Indikatorküvette/Indicator Cuvette; 1/2**

Revision date: 09.01.2017

Product code: LCK387-1

Page 4 of 8

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:	blue	
Odour:	odourless	
pH-Value (at 20 °C):		10

**Changes in the physical state**

Melting point:	no data available
Initial boiling point and boiling range:	no data available
Sublimation point:	not applicable
Softening point:	not applicable
Pour point:	not applicable
:	no data available
Flash point:	not applicable
Sustaining combustion:	No data available

**Flammability**

Solid:	not applicable
Gas:	not applicable

**Explosive properties**

not applicable

Lower explosion limits:	not applicable
Upper explosion limits:	not applicable
Ignition temperature:	no data available

**Auto-ignition temperature**

Solid:	not applicable
Gas:	not applicable

Decomposition temperature: no data available

**Oxidizing properties**

not applicable

Vapour pressure:	no data available
Vapour pressure:	no data available
Density (at 20 °C):	1 g/cm <sup>3</sup>
Bulk density:	not applicable
Water solubility: (at 20 °C)	completely soluble

**Solubility in other solvents**

no data available

Partition coefficient:	no data available
Viscosity / dynamic:	no data available

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

**LCK 387 TOC/COT, Indikatorküvette/Indicator Cuvette; 1/2**

Revision date: 09.01.2017

Product code: LCK387-1

Page 5 of 8

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**

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 mg/kg	2600	Ratte	RTECS

**Irritation and corrosivity**

No known effect.

**Sensitising effects**

Contains no substance or substances classified as sensitising.

**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.

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

## LCK 387 TOC/COT, Indikatorküvette/Indicator Cuvette; 1/2

Revision date: 09.01.2017

Product code: LCK387-1

Page 6 of 8

**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	96 h	Gambusia affinis (Mosquito fish)	IUCLID
	Acute algae toxicity	ErC50	2500 mg/l	72 h	Pseudokirchneriella subcapitata (green algae)	IUCLID
	Acute crustacea toxicity	EC50	825 mg/l	48 h	Daphnia magna (Water flea)	IUCLID
1310-73-2	sodium hydroxide; caustic soda					
	Acute fish toxicity	LC50	45,4 mg/l	96 h	Onchorhynchus mykiss	

**12.2. Persistence and degradability**

No data is available on the product itself.

**12.3. Bioaccumulative potential**

No data is available on the product itself.

**12.4. Mobility in soil**

no data available

**12.5. Results of PBT and vPvB assessment**

no data available

**12.6. Other adverse effects**

No known effect.

**Further information**

no data available

**SECTION 13: Disposal considerations**

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### LCK 387 TOC/COT, Indikatorküvette/Indicator Cuvette; 1/2

Revision date: 09.01.2017

Product code: LCK387-1

Page 7 of 8

#### **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

##### **Contaminated packaging**

Dispose of as unused product.

## 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)**

##### **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

#### **Other applicable information**

no data available

## 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):                   -- not water contaminating

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**LCK 387 TOC/COT, Indikatorküvette/Indicator Cuvette; 1/2**

Revision date: 09.01.2017

Product code: LCK387-1

Page 8 of 8

**15.2. Chemical safety assessment**

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

**SECTION 16: Other information****Changes**

Revision Date 09.01.2017

Safety datasheet sections which have been updated: 1

Revision Date 14.12.2016

Safety datasheet sections which have been updated: 11

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

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.

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



**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**LCK 387 TOC/COT, Aufschlussküvette/Digestion Cuvette; 2/2**

Revision date: 09.01.2017

Product code: LCK387-2

Page 1 of 10

**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1. Product identifier**

LCK 387 TOC/COT, Aufschlussküvette/Digestion Cuvette; 2/2

**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 number:**

Poison Control Center Mainz: Tel: +49 (0) 6131 19240 - 24 hour emergency service -

**SECTION 2: Hazards identification****2.1. Classification of the substance or mixture****Regulation (EC) No. 1272/2008**

Hazard categories:

Skin corrosion/irritation: Skin Irrit. 2

Serious eye damage/eye irritation: Eye Dam. 1

Respiratory or skin sensitisation: Resp. Sens. 1

Respiratory or skin sensitisation: Skin Sens. 1

Hazard Statements:

Causes skin irritation.

Causes serious eye damage.

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

May cause an allergic skin reaction.

**2.2. Label elements****Regulation (EC) No. 1272/2008****Hazard components for labelling**

Sodium peroxodisulfate

phosphoric acid; orthophosphoric acid &lt;2 %

Periodic acid

**Signal word:** Danger

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**LCK 387 TOC/COT, Aufschlussküvette/Digestion Cuvette; 2/2**

Revision date: 09.01.2017

Product code: LCK387-2

Page 2 of 10

**Pictograms:****Hazard statements**

- H315 Causes skin irritation.  
H318 Causes serious eye damage.  
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
H317 May cause an allergic skin reaction.

**Precautionary statements**

- P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
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.  
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.  
P342+P311 If experiencing respiratory symptoms: Call a POISON CENTER/doctor.  
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**

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

**LCK 387 TOC/COT, Aufschlussküvette/Digestion Cuvette; 2/2**

Revision date: 09.01.2017

Product code: LCK387-2

Page 3 of 10

**Hazardous components**

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	GHS Classification			
7732-18-5	Water			> 50 %
	231-791-2			
7558-79-4	di-Sodium hydrogen phosphate			< 40 %
	231-448-7		01-2119489797-11	
	Skin Irrit. 2, Eye Irrit. 2; H315 H319			
7664-38-2	phosphoric acid; orthophosphoric acid ... %			< 2 %
	231-633-2	015-011-00-6		
	Skin Corr. 1B; H314			
7775-27-1	Sodium peroxodisulfate			< 2,5 %
	231-892-1			
	Ox. Sol. 3, Acute Tox. 4, Skin Irrit. 2, Eye Irrit. 2, Resp. Sens. 1, Skin Sens. 1, STOT SE 3; H272 H302 H315 H319 H334 H317 H335			
10450-60-9	Periodic acid			< 2 %
	233-937-0			
	Ox. Sol. 2, Skin Corr. 1B; H272 H314			
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).

**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**

Irritation and corrosion

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

Treat symptomatically.

**SECTION 5: Firefighting measures**

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### LCK 387 TOC/COT, Aufschlussküvette/Digestion Cuvette; 2/2

Revision date: 09.01.2017

Product code: LCK387-2

Page 4 of 10

#### 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. 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.

Storage temperature: 2-8 °C

##### 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/m <sup>3</sup>	fibres/ml	Category	Origin
7775-27-1	(OLD) Disodium peroxodisulphate (measured as [S2O8])	-	1		TWA (8 h)	OES
7664-38-2	Orthophosphoric acid	-	1		TWA (8 h)	WEL
		-	2		STEL (15 min)	WEL

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

**LCK 387 TOC/COT, Aufschlussküvette/Digestion Cuvette; 2/2**

Revision date: 09.01.2017

Product code: LCK387-2

Page 5 of 10

**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 0,20 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):		3

**Changes in the physical state**

Melting point:	no data available
Initial boiling point and boiling range:	no data available
Sublimation point:	not applicable
Softening point:	not applicable
Pour point:	not applicable
:	no data available
Flash point:	not applicable
Sustaining combustion:	No data available

**Flammability**

Solid:	not applicable
Gas:	not applicable

**Explosive properties**

not applicable

Lower explosion limits:	not applicable
Upper explosion limits:	not applicable
Ignition temperature:	no data available

**Auto-ignition temperature**

Solid:	not applicable
--------	----------------

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

**LCK 387 TOC/COT, Aufschlussküvette/Digestion Cuvette; 2/2**

Revision date: 09.01.2017

Product code: LCK387-2

Page 6 of 10

Gas:	not applicable
Decomposition temperature:	no data available
<b>Oxidizing properties</b>	
not applicable	
Vapour pressure:	no data available
Vapour pressure:	no data available
Density (at 20 °C):	1,37 g/cm <sup>3</sup>
Bulk density:	not applicable
Water solubility: (at 20 °C)	completely soluble
<b>Solubility in other solvents</b>	
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
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**

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.

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

## LCK 387 TOC/COT, Aufschlussküvette/Digestion Cuvette; 2/2

Revision date: 09.01.2017

Product code: LCK387-2

Page 7 of 10

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
7558-79-4	di-Sodium hydrogen phosphate				
	oral	LD50 mg/kg	17000	rat	
7664-38-2	phosphoric acid; orthophosphoric acid ... %				
	dermal	LD50 mg/kg	2740	rabbit	IUCLID
7775-27-1	Sodium peroxodisulfate				
	oral	LD50 mg/kg	920	rat	
	inhalation (4 h) aerosol	LC50 mg/l	> 5,1	Merck	

**Irritation and corrosivity**

H318 - Causes serious eye damage.  
May cause skin irritation.

**Sensitising effects**

May cause sensitisation by skin contact. (Sodium peroxodisulfate)  
May cause sensitisation by inhalation. (Sodium peroxodisulfate)

**Carcinogenic/mutagenic/toxic effects for reproduction**

Contains no ingredient listed as a carcinogen

**STOT-single exposure**

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

**STOT-repeated exposure**

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

**Aspiration hazard**

No aspiration toxicity classification

**Specific effects in experiment on an animal**

No data is available on the product itself.

**Additional information on tests**

no data available

**Practical experience****Observations relevant to classification**

no data available

**Other observations**

no data available

**Further information**

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

**SECTION 12: Ecological information****12.1. Toxicity**

No data is available on the product itself.  
Do not flush into surface water or sanitary sewer system.

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

## LCK 387 TOC/COT, Aufschlussküvette/Digestion Cuvette; 2/2

Revision date: 09.01.2017

Product code: LCK387-2

Page 8 of 10

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h]   [d]	Species	Source	Method
7558-79-4	di-Sodium hydrogen phosphate					
	Acute crustacea toxicity	EC50 mg/l	1089	48 h	Daphnia magna (Water flea)	
7664-38-2	phosphoric acid; orthophosphoric acid ... %					
	Acute fish toxicity	LC50	138 mg/l	96 h	Gambusia affinis	
7775-27-1	Sodium peroxodisulfate					
	Acute fish toxicity	LC50	771 mg/l	96 h	Oncorhynchus mykiss (rainbow trout)	
	Acute crustacea toxicity	EC50	133 mg/l	48 h	Daphnia magna (Water flea)	

**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

**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**

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

**List of Wastes Code - residues/unused products**

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

**List of Wastes Code - used product**

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

**List of Wastes Code - contaminated packaging**

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

**Contaminated packaging**

Dispose of as unused product.



**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**LCK 387 TOC/COT, Aufschlussküvette/Digestion Cuvette; 2/2**

Revision date: 09.01.2017

Product code: LCK387-2

Page 9 of 10

**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)****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

**Other applicable information**

no data available

**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):

boric acid

Restrictions on use (REACH, annex XVII):

Entry 30: 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 Date 09.01.2017

Safety datasheet sections which have been updated: 1

Revision Date 14.12.2016

Safety datasheet sections which have been updated: 2, 3, 4, 11

Revision Date 13.05.2015

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

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**LCK 387 TOC/COT, Aufschlussküvette/Digestion Cuvette; 2/2**

Revision date: 09.01.2017

Product code: LCK387-2

Page 10 of 10

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

H272	May intensify fire; oxidiser.
H302	Harmful if swallowed.
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.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.
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.)*