

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### LCK 228 Kalium/Potassium, Sample cuvette; 1/3

Revision date: 21.03.2017

Product code: LCK228-1

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

### 1.1. Product identifier

LCK 228 Kalium/Potassium, 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

### 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:

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 3

Hazard Statements:

Harmful if swallowed.

Causes skin irritation.

May cause an allergic skin reaction.

Causes serious eye irritation.

May cause respiratory irritation.

Suspected of causing genetic defects.

May cause cancer.

### 2.2. Label elements

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

#### Hazard components for labelling

formaldehyde ... %

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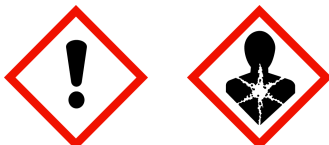
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**Signal word:** Danger

**Pictograms:**

**Hazard statements**

H302	Harmful if swallowed.
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.

**Precautionary statements**

P201	Obtain special instructions before use.
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.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P337+P313	If eye irritation persists: 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**
**Hazardous components**

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification according to Regulation (EC) No. 1272/2008 [CLP]			
7732-18-5	Water			> 90 %
	231-791-2			
50-00-0	formaldehyde ... %			< 10 %
	200-001-8	605-001-00-5		
	Carc. 1B, Muta. 2, Acute Tox. 3, Acute Tox. 3, Acute Tox. 3, Skin Corr. 1B, Skin Sens. 1; H350 H341 H301 H311 H331 H314 H317			

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.

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**After inhalation**

Move to fresh air.

**After contact with skin**

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

**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.

Consult a physician.

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

irritant effects, sensitising effects

**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**

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

Accessible only for authorized persons.

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

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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
50-00-0	Formaldehyde	2	2.5		TWA (8 h)	WEL
		2	2.5		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 at the end of workday.

#### Eye/face protection

Safety glasses with side-shields

#### Hand protection

Use barrier skin cream.

Chemical resistant protective gloves

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it. 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.

## 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):		5

#### Changes in the physical state

Melting point:	not applicable
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:	-

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Sustaining combustion: No data available

**Flammability**

Solid: no data available

Gas: no data available

**Explosive properties**

no data available

Lower explosion limits: not applicable

Upper explosion limits: not applicable

Ignition temperature: no data available

**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 available

Vapour pressure: no data available

Density: 1,02 g/cm<sup>3</sup>

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

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**

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.

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#### 10.5. Incompatible materials

Strong acids and oxidizing agents

#### 10.6. Hazardous decomposition products

Carbon oxides

Methanol

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

##### Toxicokinetics, metabolism and distribution

No toxicology information is available.

##### Acute toxicity

No data is available on the product itself.

##### ATEmix calculated

ATE (oral) 1061,8 mg/kg

CAS No	Chemical name				
	Exposure route	Dose	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			

##### Irritation and corrosivity

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

##### 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.

##### 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

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

### SECTION 12: Ecological information

#### 12.1. Toxicity

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No information on ecology is available.

#### **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.

### SECTION 13: Disposal considerations

#### **13.1. Waste treatment methods**

##### **Advice on disposal**

In accordance with local and national regulations.

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

##### **Waste disposal number of waste from residues/unused products**

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

##### **Waste disposal number of used product**

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

##### **Waste disposal number of contaminated packaging**

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

### SECTION 14: Transport information

#### **Land transport (ADR/RID)**

<b><u>14.1. UN number:</u></b>	UN 3316
<b><u>14.2. UN proper shipping name:</u></b>	Chemical kit
<b><u>14.3. Transport hazard class(es):</u></b>	9
<b><u>14.4. Packing group:</u></b>	II
Hazard label:	9



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

#### **Inland waterways transport (ADN)**

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#### 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



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 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: A44 A163  
Limited quantity Passenger: 1 kg  
Passenger LQ: Y960  
Excepted quantity: E0  
IATA-packing instructions - Passenger: 960  
IATA-max. quantity - Passenger: 10 kg  
IATA-packing instructions - Cargo: 960  
IATA-max. quantity - Cargo: 10 kg

#### 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 relevant

#### Other applicable information

These transport data apply to the entire pack

### 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 ... %



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#### Additional information

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

#### National regulatory information

Employment restrictions: Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC).

Water contaminating class (D): 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 21.03.2017

Safety datasheet sections which have been updated: 7, 9, 14, 15

Revision: 1.03.2016

Safety datasheet sections which have been updated: 2, 11

Revision: 24.09.2014

Safety datasheet sections which have been updated: 4, 6, 7-12, 14, 15

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

H301	Toxic if swallowed.
H302	Harmful if swallowed.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H335	May cause respiratory irritation.
H341	Suspected of causing genetic defects.
H350	May cause cancer.

#### Further Information

The information is based on present level of our knowledge. It does not, however, give assurances of product properties and establishes no contract legal rights.

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

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Product code: LCK228-2

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

### 1.1. Product identifier

LCK 228 Kalium/Potassium, LCK 228 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 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:

Serious eye damage/eye irritation: Eye Dam. 1

Hazard Statements:

Causes serious eye damage.

### 2.2. Label elements

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

##### Hazard components for labelling

tetrasodium ethylene diamine tetraacetate

Signal word: Danger

Pictograms:



##### Hazard statements

H318 Causes serious eye damage.

##### Precautionary statements

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

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

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P310 present and easy to do. Continue rinsing.  
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			Quantity
	EC No	Index No	REACH No	
	Classification according to Regulation (EC) No. 1272/2008 [CLP]			
7732-18-5	Water			> 90 %
	231-791-2			
64-02-8	tetrasodium ethylene diamine tetraacetate			< 10 %
	200-573-9	607-428-00-2		
	Acute Tox. 4, Eye Dam. 1; H302 H318			

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.

##### After inhalation

Move to fresh air.

##### After contact with skin

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

##### After contact with eyes

Immediately flush eye(s) with plenty of water.

##### After ingestion

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

Consult a physician.

#### 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.

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#### **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**

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.

#### **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**

##### **Protective and hygiene measures**

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

Wash hands before breaks and at the end of workday.

##### **Eye/face protection**

Safety glasses with side-shields

##### **Hand protection**

Use barrier skin cream.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

##### **Skin protection**

Avoid contact with skin, eyes and clothing.

##### **Respiratory protection**

Provide adequate ventilation.

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**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):		11

**Changes in the physical state**

Melting point:	no data available
Initial boiling point and boiling range:	100 °C
Sublimation point:	not applicable
Softening point:	not applicable
Pour point:	not applicable
:	no data available
Flash point:	-
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:	not applicable

**Auto-ignition temperature**

Solid:	not applicable
Gas:	not applicable

Decomposition temperature:	not applicable
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**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)	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
Vapour density:	no data available
Evaporation rate:	no data available
Solvent separation test:	no data available

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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**

Stable under recommended storage conditions.

**10.3. Possibility of hazardous reactions**

Hazardous polymerisation does not occur.

**10.4. Conditions to avoid**

No decomposition if used as directed.

**10.5. Incompatible materials**

None known.

**10.6. Hazardous decomposition products**

No hazardous decomposition products are known.

**SECTION 11: Toxicological information****11.1. Information on toxicological effects****Toxicokinetics, 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
64-02-8	tetrasodium ethylene diamine tetraacetate				
	oral	LD50 mg/kg	1658	rat	

**Irritation and corrosivity**

H318 - Causes serious eye damage.

**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.

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#### 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.

#### 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.

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

##### Advice on disposal

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

##### Waste disposal number of waste from residues/unused products

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

##### Waste disposal number of used product

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

##### Waste disposal number of contaminated packaging

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

### 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):

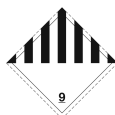
9

##### 14.4. Packing group:

II

Hazard label:

9



Classification code:

M11

Special Provisions:

251 340

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Limited quantity:	SP 251
Excepted quantity:	SP 340
Transport category:	2
Hazard No:	-
Tunnel restriction code:	E

#### Inland waterways transport (ADN)

##### Other applicable information (inland waterways transport)

Not tested

#### Marine transport (IMDG)

<b>14.1. UN number:</b>	UN 3316
<b>14.2. UN proper shipping name:</b>	CHEMICAL KIT
<b>14.3. Transport hazard class(es):</b>	9
<b>14.4. Packing group:</b>	II
Hazard label:	9



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

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

<b>14.1. UN number:</b>	UN 3316
<b>14.2. UN proper shipping name:</b>	CHEMICAL KIT
<b>14.3. Transport hazard class(es):</b>	9
<b>14.4. Packing group:</b>	II
Hazard label:	9



Special Provisions:	A44 A163
Limited quantity Passenger:	1 kg
Passenger LQ:	Y960
Excepted quantity:	E0
IATA-packing instructions - Passenger:	960
IATA-max. quantity - Passenger:	10 kg
IATA-packing instructions - Cargo:	960
IATA-max. quantity - Cargo:	10 kg

#### 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 relevant

#### Other applicable information

These transport data apply to the entire pack



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#### 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): 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 21.03.2017

Safety datasheet sections which have been updated: 9

Revision: 1.03.2016

Safety datasheet sections which have been updated: 2, 11

Revision: 24.09.2014

Safety datasheet sections which have been updated: 4, 6, 7-12, 14, 15

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

H302 Harmful if swallowed.

H318 Causes serious eye damage.

##### Further Information

The information is based on present level of our knowledge. It does not, however, give assurances of product properties and establishes no contract legal rights.

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

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according to Regulation (EC) No 1907/2006

**LCK 228 Kalium/Potassium, LCK B; 3/3**

Revision date: 21.03.2017

Product code: LCK228-3

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

LCK 228 Kalium/Potassium, LCK B; 3/3

CAS No: 143-66-8

EC No: 205-605-5

**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:

Acute toxicity: Acute Tox. 3

Hazard Statements:

Toxic if swallowed.

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

Sodium tetraphenyl borate

**Signal word:** Danger**Pictograms:****Hazard statements**

H301

Toxic if swallowed.

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**Precautionary statements**

P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P301+P310 IF SWALLOWED: 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****3.1. Substances****Hazardous components**

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification according to Regulation (EC) No. 1272/2008 [CLP]			
143-66-8	Sodium tetraphenyl borate			100 %
	205-605-5			
	Acute Tox. 3; H301			

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.

**After contact with skin**

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

**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.  
Consult a physician.

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

If swallowed: Nausea, Vomiting, Spasm,

**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.

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#### **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. Ensure adequate ventilation.

#### **6.2. Environmental precautions**

Do not flush into surface water or sanitary sewer system.

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

Use mechanical handling equipment.  
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.  
Use barrier skin cream. Wash hands before breaks and at the end of workday.

#### **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.

##### **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**

##### **Additional advice on limit values**

None known.

#### **8.2. Exposure controls**

##### **Protective and hygiene measures**

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

Wash hands before breaks and at the end of workday.

##### **Eye/face protection**

Safety glasses with side-shields

##### **Hand protection**

Use barrier skin cream.

Chemical resistant protective gloves

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it. 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

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**LCK 228 Kalium/Potassium, LCK B; 3/3**

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min

**Skin protection**

Avoid contact with skin, eyes and clothing.

**Respiratory protection**

Provide adequate ventilation.

**SECTION 9: Physical and chemical properties****9.1. Information on basic physical and chemical properties**

Physical state:	solid
Colour:	colourless
Odour:	phenol-like
pH-Value (at 20 °C):	8 (5 % solution)

**Changes in the physical state**

Melting point:	> 300 °C
Initial boiling point and boiling range:	no data available
Sublimation point:	no data available
Softening point:	not applicable
Pour point:	not applicable
Flash point:	not applicable
Sustaining combustion:	No data available

**Flammability**

Solid:	no data available
Gas:	no data available

**Explosive properties**

not applicable

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

**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 available

Density: no data available

Bulk density: 500 kg/m<sup>3</sup>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

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according to Regulation (EC) No 1907/2006

**LCK 228 Kalium/Potassium, LCK B; 3/3**

Revision date: 21.03.2017

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Evaporation rate: no data available  
Solvent separation test: no data available  
Solvent content: 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**

Reacts with the following substances: Oxidizing agents, Acids, Bases

**10.4. Conditions to avoid**

To avoid thermal decomposition, do not overheat.  
Exposure to moisture.

**10.5. Incompatible materials**

None known.

**10.6. Hazardous decomposition products**

None known.

**SECTION 11: Toxicological information****11.1. Information on toxicological effects****Toxicokinetics, 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
143-66-8	Sodium tetraphenyl borate				
	oral	LD50 mg/kg	288	Ratte	

**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

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**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.

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h]   [d]	Species	Source	Method
143-66-8	Sodium tetraphenyl borate					
	Acute crustacea toxicity	EC50	32 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.

**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****Advice on disposal**

In accordance with local and national regulations.

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

**Waste disposal number of waste from residues/unused products**

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

**Waste disposal number of used product**

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

**Waste disposal number of contaminated packaging**

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

**SECTION 14: Transport information****Land transport (ADR/RID)**

<b>14.1. UN number:</b>	UN 3316
<b>14.2. UN proper shipping name:</b>	Chemical kit
<b>14.3. Transport hazard class(es):</b>	9
<b>14.4. Packing group:</b>	II

**Safety Data Sheet**


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**LCK 228 Kalium/Potassium, LCK B; 3/3**

Revision date: 21.03.2017

Product code: LCK228-3

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Hazard label: 9  
  
 Classification code: M11  
 Special Provisions: 251 340  
 Limited quantity: SP 251  
 Excepted quantity: SP 340  
 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 3316  
**14.2. UN proper shipping name:** CHEMICAL KIT  
**14.3. Transport hazard class(es):** 9  
**14.4. Packing group:** II  
 Hazard label: 9



Marine pollutant: -  
 Special Provisions: 251, 340  
 Limited quantity: SP 251  
 Excepted quantity: SP 340  
 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):** 9  
**14.4. Packing group:** II  
 Hazard label: 9



Special Provisions: A44 A163  
 Limited quantity Passenger: 1 kg  
 Passenger LQ: Y960  
 Excepted quantity: E0  
 IATA-packing instructions - Passenger: 960  
 IATA-max. quantity - Passenger: 10 kg  
 IATA-packing instructions - Cargo: 960  
 IATA-max. quantity - Cargo: 10 kg

**14.5. Environmental hazards**

ENVIRONMENTALLY HAZARDOUS: no



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#### **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

#### **Other applicable information**

These transport data apply to the entire pack

### **SECTION 15: Regulatory information**

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

##### **EU regulatory information**

##### **Additional information**

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

##### **National regulatory information**

Employment restrictions:

Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC).

Water contaminating class (D):

2 - clearly water contaminating

#### **15.2. Chemical safety assessment**

For this substance a chemical safety assessment has not been carried out.

### **SECTION 16: Other information**

#### **Changes**

Revision Date 21.03.2017

Safety datasheet sections which have been updated: 7, 9, 15

Revision: 1.03.2016

Safety datasheet sections which have been updated: 2, 11

Revision: 24.09.2014

Safety datasheet sections which have been updated: 4, 6, 7-12, 14, 15

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

H301 Toxic if swallowed.

#### **Further Information**

The information is based on present level of our knowledge. It does not, however, give assurances of product properties and establishes no contract legal rights.