

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**LCK 350 Phosphat/Phosphate, Sample cuvette; 1/4**

Revision date: 21.11.2019

Product code: LCK350-1

Page 1 of 8

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

LCK 350 Phosphat/Phosphate, 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 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**

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**

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

## LCK 350 Phosphat/Phosphate, Sample cuvette; 1/4

Revision date: 21.11.2019

Product code: LCK350-1

Page 2 of 8

## Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	GHS Classification			
7732-18-5	Water			>95 %
	231-791-2			
7664-93-9	sulphuric acid ... %			<1 %
	231-639-5	016-020-00-8		
	Skin Corr. 1A; H314			

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

## SECTION 4: First aid measures

**4.1. Description of first aid measures****General information**

Take off contaminated clothing and shoes immediately.  
Show this safety data sheet to the doctor in attendance.

**After inhalation**

Move to fresh air.  
If symptoms persist, call a physician.

**After contact with skin**

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

**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**

May cause skin irritation. May cause eye irritation.

**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.

**Unsuitable extinguishing media**

None known.

**5.2. Special hazards arising from the substance or mixture**

Fire may liberate hazardous vapours.  
In the case of respirable dust and/or fumes, use self-contained breathing apparatus and dust impervious protective suit.

**5.3. Advice for firefighters**

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.

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### LCK 350 Phosphat/Phosphate, Sample cuvette; 1/4

Revision date: 21.11.2019

Product code: LCK350-1

Page 3 of 8

#### SECTION 6: Accidental release measures

##### **6.1. Personal precautions, protective equipment and emergency procedures**

Use personal protective equipment. Only qualified personnel equipped with suitable protective equipment may intervene. Immediately evacuate personnel to safe areas.  
Do not breathe vapours, mist or gas.

##### **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 and dispose of as hazardous waste.

##### **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.  
Do not breathe vapours/dust.

###### **Advice on protection against fire and explosion**

None known.  
See also section 5

###### **Further information on handling**

Observe label precautions.

##### **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**

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

CAS No	Substance	ppm	mg/m <sup>3</sup>	fibres/ml	Category	Origin
7664-93-9	Sulphuric acid (mist)	-	0.05		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 dangerous substance at the specific workplace.

Wash hands before breaks and after work.

General industrial hygiene practice.

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

## LCK 350 Phosphat/Phosphate, Sample cuvette; 1/4

Revision date: 21.11.2019

Product code: LCK350-1

Page 4 of 8

**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: &gt;480 min. In splash contact: Glove material: nitrile rubber, Layer thickness 0.40 mm, Breakthrough time: &gt; 30 min

**Skin protection**

Remove and wash contaminated clothing before re-use.

**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):	1
<b>Changes in the physical state</b>	
Melting point:	not applicable
Initial boiling point and boiling range:	approx. 100 °C
Sublimation point:	not applicable
Softening point:	not applicable
Pour point:	no data available
:	no data available
Flash point:	not applicable
<b>Flammability</b>	
Solid:	not applicable
Gas:	not applicable
<b>Explosive properties</b>	
not applicable	
Lower explosion limits:	not applicable
Upper explosion limits:	not applicable
Ignition temperature:	not applicable
<b>Auto-ignition temperature</b>	
Solid:	not applicable
Gas:	not applicable
Decomposition temperature:	not applicable
<b>Oxidizing properties</b>	
not applicable	
Vapour pressure: (at 10 °C)	15 hPa
Vapour pressure:	no data available
Density (at 20 °C):	1,04 g/cm <sup>3</sup>
Bulk density:	not applicable
Water solubility: (at 20 °C)	completely soluble

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### LCK 350 Phosphat/Phosphate, Sample cuvette; 1/4

Revision date: 21.11.2019

Product code: LCK350-1

Page 5 of 8

#### Solubility in other solvents

soluble

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

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

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.

Contact with metals liberates hydrogen gas.

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

##### Toxicokinetics, metabolism and distribution

No toxicology information is available.

##### Acute toxicity

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

##### 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.

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### LCK 350 Phosphat/Phosphate, Sample cuvette; 1/4

Revision date: 21.11.2019

Product code: LCK350-1

Page 6 of 8

**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.

**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.

**12.2. Persistence and degradability**

The methods for determining biodegradability are not applicable to inorganic substances.

**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

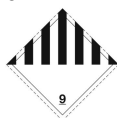
**List of Wastes Code - used product**

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)**

<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



Classification code: M11

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

**LCK 350 Phosphat/Phosphate, Sample cuvette; 1/4**

Revision date: 21.11.2019

Product code: LCK350-1

Page 7 of 8

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

**Inland waterways transport (ADN)****Other applicable information (inland waterways transport)**

Not tested

**Marine transport (IMDG)**

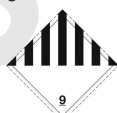
**14.1. UN number:** UN 3316  
**14.2. UN proper shipping name:** CHEMICAL KIT  
**14.3. Transport hazard class(es):** 9  
**14.4. Packing group:** II  
 Hazard label: 9



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**

Use personal protective equipment.

**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

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**LCK 350 Phosphat/Phosphate, Sample cuvette; 1/4**

Revision date: 21.11.2019

Product code: LCK350-1

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****Additional information**

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

**National regulatory information**

Water contaminating class (D): -- not 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 21.11.2019

Safety datasheet sections which have been updated: 11, 15

Revision Date 20.03.2017

Safety datasheet sections which have been updated: 4, 11, 14

Revision: 09.10.2014

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

Revision: 23.0.2013

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

**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 350 Phosphat/Phosphate, DosiCapZip; 2/4**

Revision date: 21.11.2019

Product code: LCK350-2

Page 1 of 9

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

LCK 350 Phosphat/Phosphate, DosiCapZip; 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 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: Resp. Sens. 1

Respiratory or skin sensitisation: Skin Sens. 1

Specific target organ toxicity - single exposure: STOT SE 3

Hazard Statements:

Harmful if swallowed.

Causes skin irritation.

Causes serious eye irritation.

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

May cause an allergic skin reaction.

May cause respiratory irritation.

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

Sodium peroxodisulfate

Sodium metaborate

Lithium sulfate monohydrate

# Safety Data Sheet

according to Regulation (EC) No 1907/2006

## LCK 350 Phosphat/Phosphate, DosiCapZip; 2/4

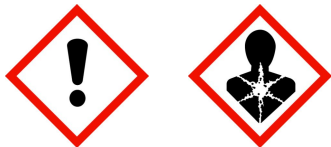
Revision date: 21.11.2019

Product code: LCK350-2

Page 2 of 9

**Signal word:** Danger

**Pictograms:**



### Hazard statements

H302 Harmful if swallowed.  
 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
 H335 May cause respiratory irritation.  
 H319 Causes serious eye irritation.  
 H315 Causes skin irritation.  
 H317 May cause an allergic skin reaction.

### Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
 P280 Wear protective gloves/protective clothing/eye protection/face protection.  
 P304+P341 IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.  
 P333+P313 If skin irritation or rash occurs: Get medical advice/attention.  
 P337+P313 If eye irritation persists: Get medical advice/attention.  
 P342+P311 If experiencing respiratory symptoms: 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	
	GHS Classification			
7775-27-1	Sodium peroxodisulfate			71 %
	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			
10555-76-7	Sodium metaborate			21 %
	231-891-6			
	Skin Irrit. 2, Eye Irrit. 2, STOT SE 3; H315 H319 H335			
10102-25-7	Lithium sulfate monohydrate			5-10 %
	233-820-4			
	Acute Tox. 4; H302			

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

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

# Safety Data Sheet

according to Regulation (EC) No 1907/2006

## LCK 350 Phosphat/Phosphate, DosiCapZip; 2/4

Revision date: 21.11.2019

Product code: LCK350-2

Page 3 of 9

### General information

Take off all contaminated clothing immediately. Consult a physician.

### After inhalation

Move to fresh air.

### After contact with skin

Wash off immediately with plenty of water. If symptoms persist, call a physician. Show this safety data sheet to the doctor in attendance.

### 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

Irritation and corrosion, Allergic reactions, Cough, Shortness of breath

### 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.

#### Unsuitable extinguishing media

None known.

### 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

Use mechanical handling equipment.

### 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.

#### Further information on handling

Use barrier skin cream.

### 7.2. Conditions for safe storage, including any incompatibilities

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

**LCK 350 Phosphat/Phosphate, DosiCapZip; 2/4**

Revision date: 21.11.2019

Product code: LCK350-2

Page 4 of 9

**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****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

**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.

**Eye/face protection**

Safety glasses with side-shields

**Hand protection**

Use barrier skin cream.

Wash hands before breaks and after work.

Chemical resistant gloves made of butyl rubber or nitrile rubber category III according to EN 374.

**Skin protection**

Avoid contact with skin and eyes.

**Respiratory protection**

Breathing apparatus only if aerosol or dust is formed. 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: solid (lyophilised)

Colour: white

Odour: odourless

pH-Value (at 20 °C): 3,5-3,8 (10 % solution)

**Changes in the physical state**

Melting point: no data available

Initial boiling point and boiling range: not applicable

Sublimation point: not applicable

Softening point: not applicable

Pour point: not applicable

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

**LCK 350 Phosphat/Phosphate, DosiCapZip; 2/4**

Revision date: 21.11.2019

Product code: LCK350-2

Page 5 of 9

Flash point: not applicable

**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

**Oxidizing properties**

The product has been shown not to be oxidising in a test following Directive 67/548/EEC ( Method A17, oxidising properties).

Vapour pressure: no data available

Vapour pressure: no data available

Density: no data available

Bulk density: no data available

Water solubility:  
(at 20 °C) completely soluble**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: not applicable

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**

No dangerous reaction known under conditions of normal use.

**10.2. Chemical stability**

Stable under recommended storage conditions.

**10.3. Possibility of hazardous reactions**

No data is available on the product itself.

**10.4. Conditions to avoid**

None known.

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

**LCK 350 Phosphat/Phosphate, DosiCapZip; 2/4**

Revision date: 21.11.2019

Product code: LCK350-2

Page 6 of 9

**10.5. Incompatible materials**

None known.

**10.6. Hazardous decomposition products**

No decomposition if used 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
7775-27-1	Sodium peroxodisulfate				
	oral	LD50 mg/kg	920	rat	
	inhalation (4 h) aerosol	LC50 mg/l	> 5,1	Merck	
10102-25-7	Lithium sulfate monohydrate				
	oral	LD50 mg/kg	613	rat	

**Irritation and corrosivity**

Causes skin irritation.

Causes serious eye irritation.

**Sensitising effects**

May cause allergy or asthma symptoms or breathing difficulties if inhaled. (Sodium peroxodisulfate)

May cause an allergic skin reaction. (Sodium peroxodisulfate)

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

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

**STOT-single exposure**

May cause respiratory irritation. (Sodium peroxodisulfate; Sodium metaborate)

**STOT-repeated exposure**

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

**Aspiration hazard**

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

**Specific effects in experiment on an animal**

No toxicology information is available.

**Additional information on tests**

None known.

**Further information**

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

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

Do not flush into surface water or sanitary sewer system.

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

**LCK 350 Phosphat/Phosphate, DosiCapZip; 2/4**

Revision date: 21.11.2019

Product code: LCK350-2

Page 7 of 9

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h]   [d]	Species	Source	Method
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 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)****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

Limited quantity:

SP251

Excepted quantity:

SP340

Transport category:

2

Hazard No:

-

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

**LCK 350 Phosphat/Phosphate, DosiCapZip; 2/4**

Revision date: 21.11.2019

Product code: LCK350-2

Page 8 of 9

Tunnel restriction code: E

**Inland waterways transport (ADN)****Other applicable information (inland waterways transport)**

Not tested

**Marine transport (IMDG)**

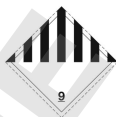
**14.1. UN number:** UN 3316  
**14.2. UN proper shipping name:** CHEMICAL KIT  
**14.3. Transport hazard class(es):** 9  
**14.4. Packing group:** II  
 Hazard label: 9



Marine pollutant: —  
 Special Provisions: 251, 340  
 Limited quantity: 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**

Use personal protective equipment.

**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****National regulatory information**



## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### LCK 350 Phosphat/Phosphate, DosiCapZip; 2/4

Revision date: 21.11.2019

Product code: LCK350-2

Page 9 of 9

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 21.11.2019

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

Revision Date 20.03.2017

Safety datasheet sections which have been updated: 14

Revision: 22.12.2015

Safety datasheet sections which have been updated: 3

Revision: 14.10.2015

Safety datasheet sections which have been updated: 9

Revision: 09.10.2014

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

Revision: 23.0.2013

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

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

Classification	Classification procedure
Acute Tox. 4; H302	Calculation method
Skin Irrit. 2; H315	Calculation method
Eye Irrit. 2; H319	Calculation method
Resp. Sens. 1; H334	Calculation method
Skin Sens. 1; H317	Calculation method
STOT SE 3; H335	Calculation method

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

H272	May intensify fire; oxidiser.
H302	Harmful if swallowed.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled .
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.)*

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**LCK 350 Phosphat/Phosphate, LCK 350 B; 3/4**

Revision date: 21.11.2019

Product code: LCK350-3

Page 1 of 9

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

LCK 350 Phosphat/Phosphate, LCK 350 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**

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:

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

Skin corrosion/irritation: Skin Corr. 1

Serious eye damage/eye irritation: Eye Dam. 1

Hazard Statements:

May be corrosive to metals.

Causes severe skin burns and eye damage.

Causes serious eye damage.

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

sulphuric acid ... %

**Signal word:** Danger**Pictograms:**

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

## LCK 350 Phosphat/Phosphate, LCK 350 B; 3/4

Revision date: 21.11.2019

Product code: LCK350-3

Page 2 of 9

**Hazard statements**

- H290 May be corrosive to metals.  
 H314 Causes severe skin burns and eye damage.

**Precautionary statements**

- P280 Wear protective gloves/protective clothing/eye protection/face protection.  
 P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.  
 P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.  
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 P310 Immediately call a POISON CENTER/doctor.

**Additional advice on labelling**

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

**2.3. Other hazards**

None known.

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

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	GHS Classification			
7732-18-5	Water			>80 %
	231-791-2			
7664-93-9	sulphuric acid ... %			16 %
	231-639-5	016-020-00-8		
	Skin Corr. 1A; H314			
12054-85-2	Ammonium heptamolybdate tetrahydrate			<2 %
	234-722-4			
	Acute Tox. 4, Skin Irrit. 2, Eye Irrit. 2, STOT SE 3; H302 H315 H319 H335			
5329-14-6	sulphamidic acid; sulphamic acid; sulfamic acid			<1 %
	226-218-8	016-026-00-0		
	Skin Irrit. 2, Eye Irrit. 2, Aquatic Chronic 3; H315 H319 H412			
28300-74-5	Potassium antimony(III) oxide tartrate hemihydrate			<1 %
	234-293-3	051-003-00-9		
	Acute Tox. 4, Acute Tox. 4, Aquatic Chronic 2; H332 H302 H411			

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.

# Safety Data Sheet

according to Regulation (EC) No 1907/2006

## LCK 350 Phosphat/Phosphate, LCK 350 B; 3/4

Revision date: 21.11.2019

Product code: LCK350-3

Page 3 of 9

### After contact with skin

Wash off immediately with plenty of water for at least 15 minutes. Consult a physician. Show this safety data sheet to the doctor in attendance.

### 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. Consult a physician. 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

Soak up with inert absorbent material and dispose of as hazardous waste.

### 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. Do not breathe vapours/dust.

### 7.2. Conditions for safe storage, including any incompatibilities

#### Requirements for storage rooms and vessels

Keep in a dry place.

### 7.3. Specific end use(s)

Reagent for analysis

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

**LCK 350 Phosphat/Phosphate, LCK 350 B; 3/4**

Revision date: 21.11.2019

Product code: LCK350-3

Page 4 of 9

**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
7664-93-9	Sulphuric acid (mist)	-	0.05		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 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

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

**Skin protection**

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 230 °C):	1

**Changes in the physical state**

Melting point:	<-4 °C
Initial boiling point and boiling range:	>100 °C
Sublimation point:	not applicable
Softening point:	not applicable
Pour point:	not applicable
:	not applicable
Flash point:	not applicable

**Flammability**

Solid: not applicable

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

**LCK 350 Phosphat/Phosphate, LCK 350 B; 3/4**

Revision date: 21.11.2019

Product code: LCK350-3

Page 5 of 9

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

**Oxidizing properties**

not applicable

Vapour pressure: 20 hPa  
(at 20 °C)

Vapour pressure: no data available

Density (at 20 °C): 1,11 g/cm<sup>3</sup>

Bulk density: not applicable

Water solubility: 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

Solvent content: no data available

**9.2. Other information**

Solid content: not applicable

**SECTION 10: Stability and reactivity****10.1. Reactivity**

May be corrosive to metals.

**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**

None known.

**10.5. Incompatible materials**

None known.

**10.6. Hazardous decomposition products**

Sulphur trioxide, Sulphur oxides

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### LCK 350 Phosphat/Phosphate, LCK 350 B; 3/4

Revision date: 21.11.2019

Product code: LCK350-3

Page 6 of 9

## 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
12054-85-2	Ammonium heptamolybdate tetrahydrate				
	oral	ATE 500 mg/kg			
5329-14-6	sulphamic acid; sulphamic acid; sulfamic acid				
	oral	LD50 1450 mg/kg	Rat		
28300-74-5	Potassium antimony(III) oxide tartrate hemihydrate				
	oral	ATE 500 mg/kg			
	inhalation vapour	ATE 11 mg/l			
	inhalation aerosol	ATE 1,5 mg/l			

#### Irritation and corrosivity

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

#### 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 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.

#### 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

Do not flush into surface water or sanitary sewer system.

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

## LCK 350 Phosphat/Phosphate, LCK 350 B; 3/4

Revision date: 21.11.2019

Product code: LCK350-3

Page 7 of 9

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h]   [d]	Species	Source	Method
12054-85-2	Ammonium heptamolybdate tetrahydrate					
	Acute fish toxicity	LC50	420 mg/l	96 h		
	Acute crustacea toxicity	EC50	140 mg/l	48 h		
5329-14-6	sulphamidic acid; sulphamic acid; sulfamic acid					
	Acute fish toxicity	LC50	70,3 mg/l	96 h	Pimephales promelas	

**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**

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**

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**

160505 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; gases in pressure containers other than those mentioned in 16 05 04

**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
Hazard label:	9



Classification code:	M11
Special Provisions:	251 340
Limited quantity:	SP251



## Safety Data Sheet

according to Regulation (EC) No 1907/2006

**LCK 350 Phosphat/Phosphate, LCK 350 B; 3/4**

Revision date: 21.11.2019

Product code: LCK350-3

Page 8 of 9

Excepted quantity: SP340  
 Transport category: 2  
 Hazard No: -  
 Tunnel restriction code: E

**Inland waterways transport (ADN)****Other applicable information (inland waterways transport)**

Not tested

**Marine transport (IMDG)**

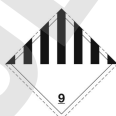
**14.1. UN number:** UN 3316  
**14.2. UN proper shipping name:** CHEMICAL KIT  
**14.3. Transport hazard class(es):** 9  
**14.4. Packing group:** II  
 Hazard label: 9



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**

Use personal protective equipment.

**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**

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### LCK 350 Phosphat/Phosphate, LCK 350 B; 3/4

Revision date: 21.11.2019

Product code: LCK350-3

Page 9 of 9

#### **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 21.11.2019

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

Revision Date 20.03.2017

Safety datasheet sections which have been updated: 14

Revision: 09.10.2014

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

Revision: 23.0.2013

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

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

Classification	Classification procedure
Met. Corr. 1; H290	On basis of test data
Skin Corr. 1; H314	On basis of test data
Eye Dam. 1; H318	Calculation method

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

H290	May be corrosive to metals.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H411	Toxic to aquatic life with long lasting effects .
H412	Harmful to aquatic life with long lasting effects .

#### **Further Information**

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

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

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**LCK 350 Phosphat/Phosphate; LCK 350 DosiCap C; 4/4**

Revision date: 21.11.2019

Product code: LCK350-4

Page 1 of 8

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

LCK 350 Phosphat/Phosphate; LCK 350 DosiCap 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 number:**

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

**Further Information**

Water analysis

**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 Irrit. 2

Specific target organ toxicity - single exposure: STOT SE 3

Hazard Statements:

Causes skin irritation.

Causes serious eye irritation.

May cause respiratory irritation.

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

Sodium metaborate

**Signal word:** Warning

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

## LCK 350 Phosphat/Phosphate; LCK 350 DosiCap C; 4/4

Revision date: 21.11.2019

Product code: LCK350-4

Page 2 of 8

## Pictograms:



## Hazard statements

H315	Causes skin irritation.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.

## Precautionary statements

P280	Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352	IF ON SKIN: Wash with plenty of water.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313	If eye irritation persists: Get medical advice/attention.

## 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	
	GHS Classification			
50-81-7	Ascorbic acid			>50 %
	200-066-2			
10555-76-7	Sodium metaborate			>25 %
	231-891-6			
	Skin Irrit. 2, Eye Irrit. 2, STOT SE 3; H315 H319 H335			
9004-54-0	Dextran			<15 %
	232-677-5			

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.

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### LCK 350 Phosphat/Phosphate; LCK 350 DosiCap C; 4/4

Revision date: 21.11.2019

Product code: LCK350-4

Page 3 of 8

#### 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**

irritant 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. 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**

Use mechanical handling equipment.

#### **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.

#### **7.2. Conditions for safe storage, including any incompatibilities**

##### **Requirements for storage rooms and vessels**

Keep in a dry 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**

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

**LCK 350 Phosphat/Phosphate; LCK 350 DosiCap C; 4/4**

Revision date: 21.11.2019

Product code: LCK350-4

Page 4 of 8

**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.

**Eye/face protection**

Safety glasses with side-shields

**Hand protection**

Use barrier skin cream.

Chemical resistant gloves made of butyl rubber or nitrile rubber category III according to EN 374. In full contact:

Gloves material: Viton, Layer thickness: 0.70 mm, Breakthrough time: >480 min. In splash contact: Glove material: nitrile rubber, Layer thickness 0,20 mm, Breakthrough time: > 30 min

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

**Respiratory protection**

Provide adequate ventilation.

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

Physical state:	solid (lyophilised)
Colour:	white
Odour:	odourless
pH-Value (at 20 °C):	4-4,5

**Changes in the physical state**

Melting point:	192 °C
Initial boiling point and boiling range:	not applicable
Sublimation point:	no data available
Softening point:	no data available
Pour point:	not applicable
:	no data available
Flash point:	not applicable

**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
----------------------------	----------------

**Oxidizing properties**

not applicable

Vapour pressure:	no data available
------------------	-------------------

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

**LCK 350 Phosphat/Phosphate; LCK 350 DosiCap C; 4/4**

Revision date: 21.11.2019

Product code: LCK350-4

Page 5 of 8

Vapour pressure:	no data available
Density:	no data available
Bulk density:	600-900 kg/m <sup>3</sup>
Water solubility:	no data available
<b>Solubility in other solvents</b>	
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:	not applicable
Solvent separation test:	not applicable
Solvent content:	not applicable

**9.2. Other information**

Solid content: 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**

None known.

**10.5. Incompatible materials**

None known.

**10.6. Hazardous decomposition products**

No decomposition if used as directed.

**SECTION 11: Toxicological information****11.1. Information on toxicological effects****Acute toxicity**

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

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
50-81-7	Ascorbic acid				
	oral	LD50 mg/kg	11900	rat	RTECS

**Irritation and corrosivity**

Causes skin irritation.

Causes serious eye irritation.

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**LCK 350 Phosphat/Phosphate; LCK 350 DosiCap C; 4/4**

Revision date: 21.11.2019

Product code: LCK350-4

Page 6 of 8

**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**

May cause respiratory irritation. (Sodium metaborate)

**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.

**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.

**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****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)****14.1. UN number:**

UN 3316

**14.2. UN proper shipping name:**

Chemical kit



## Safety Data Sheet

according to Regulation (EC) No 1907/2006

**LCK 350 Phosphat/Phosphate; LCK 350 DosiCap C; 4/4**

Revision date: 21.11.2019

Product code: LCK350-4

Page 7 of 8

**14.3. Transport hazard class(es):**

9

**14.4. Packing group:**

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)****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**

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### LCK 350 Phosphat/Phosphate; LCK 350 DosiCap C; 4/4

Revision date: 21.11.2019

Product code: LCK350-4

Page 8 of 8

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**

##### **Additional information**

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

##### **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 21.11.2019

Safety datasheet sections which have been updated: 4, 11, 15, 16

Revision Date 20.03.2017

Safety datasheet sections which have been updated: 14

Revision: 09.10.2014

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

Revision: 23.0.2013

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

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

Classification	Classification procedure
Skin Irrit. 2; H315	Calculation method
Eye Irrit. 2; H319	Calculation method
STOT SE 3; H335	Calculation method

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

H315 Causes skin irritation.  
 H319 Causes serious eye irritation.  
 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.)*