

Be Right™

# **Safety Data Sheet**

HACH LANGE GmbH

according to Regulation (EC) No 1907/2006

LCK 301 Aluminium, Sample cuvette; 1/4

Revision date: 07.03.2017 Product code: LCK301-1 Page 1 of 8

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

#### 1.1. Product identifier

LCK 301 Aluminium, 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

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HACH LANGE Ltd.

Unit 1, Chestnut Road Western Industrial Estate

IRL-Dublin 12

Tel. +353 (0)1 4602522 e-Mail: info-ie@hach.com

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

number: service -

### **SECTION 2: Hazards identification**

### 2.1. Classification of the substance or mixture

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

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

### 2.2. Label elements

### Additional advice on labelling

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

## 2.3. Other hazards

None known.

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

## 3.2. Mixtures



according to Regulation (EC) No 1907/2006

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#### **Hazardous components**

CAS No	Chemical name			Quantity		
	EC No	Index No	REACH No			
	Classification according to Regulation (EC) No. 1272/2008 [CLP]					
69-65-8	D(-)-Mannitol					
	200-711-8					
1667-99-8	Chromazurol S			<1 %		
	216-787-0					
	Skin Irrit. 2, Eye Irrit. 2, STOT SE 3; H315 H319 H335					

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

#### **SECTION 4: First aid measures**

### 4.1. Description of first aid measures

#### **General information**

Take off all contaminated clothing immediately.

#### After inhalation

Move to fresh air.

#### After contact with skin

Wash off immediately with plenty of water.

### After contact with eyes

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

#### After ingestion

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

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

No known effect.

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

Treat symptomatically.

### **SECTION 5: Firefighting measures**

### 5.1. Extinguishing media

### Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. The product itself does not burn.

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

Fire may liberate hazardous vapours.

# 5.3. Advice for firefighters

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

#### Additional information

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

### **SECTION 6: Accidental release measures**

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

Use personal protective equipment.





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#### 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.

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

### Requirements for storage rooms and vessels

Keep in a dry. cool place.

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

Reagent for analysis

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

#### 8.1. Control parameters

#### Additional advice on limit values

None known.

#### 8.2. Exposure controls

#### Appropriate engineering controls

Technical measures and appropriate working operations should be given priority over the use of personal protective equipment.

#### Protective and hygiene measures

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

Wash hands before breaks and after work.

### Eye/face protection

Safety glasses with side-shields

### Hand protection

Use barrier skin cream.

Chemical resistant gloves made of butyl rubber or nitrile rubber category III according to EN 374. In full contact: Gloves material: Viton, Layer thickness: 0.70 mm, Breakthrough time: >480 min. In splash contact: Glove material: nitrile rubber, Layer thickness 0,20 mm, Breakthrough time: > 30 min

### Skin protection

Remove and wash contaminated clothing before re-use.

#### Respiratory protection

Breathing apparatus only if aerosol or dust is formed.

Recommended Filter type: ABEK-filter

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

#### 9.1. Information on basic physical and chemical properties

Physical state: lyophilised cake Colour: reddish-violet

Odour: mild



according to Regulation (EC) No 1907/2006

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pH-Value: 6

Changes in the physical state

Melting point: 165 °C
Initial boiling point and boiling range: no data available
Sublimation point: not applicable
Softening point: not applicable
Pour point: not applicable
Flash point: not applicable

**Flammability** 

Solid: not applicable
Gas: not applicable

**Explosive properties** 

not applicable

Lower explosion limits:

Upper explosion limits:

Ignition temperature:

not applicable

not applicable

**Auto-ignition temperature** 

Solid: not applicable
Gas: not applicable

Decomposition temperature: not applicable

**Oxidizing properties** 

not applicable

Vapour pressure:

Density (at 20 °C):

Bulk density:

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

# **SECTION 10: Stability and reactivity**

#### 10.1. Reactivity

No dangerous reaction known under conditions of normal use.

# 10.2. Chemical stability



according to Regulation (EC) No 1907/2006

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Stable under recommended storage conditions.

#### 10.3. Possibility of hazardous reactions

Hazardous polymerisation does not occur.

#### 10.4. Conditions to avoid

No data is available on the product itself.

### 10.5. Incompatible materials

No data is available on the product itself.

#### 10.6. Hazardous decomposition products

No data is available on the product itself.

# **SECTION 11: Toxicological information**

### 11.1. Information on toxicological effects

#### Toxicocinetics, metabolism and distribution

No toxicology information is available.

#### **Acute toxicity**

No data is available on the product itself.

CAS No	Chemical name						
	Exposure route	Dose	Species	Source	Method		
69-65-8	D(-)-Mannitol						
	I * · * · ·	LD50 135000 mg/kg	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

### **Aspiration hazard**

No aspiration toxicity classification

### Specific effects in experiment on an animal

No data is available on the product itself.

### **Further information**

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

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





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#### 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.

### Contaminated packaging

Dispose of as unused product.

The hazard and precautionary statements displayed on the label also apply to any residues left in the container.

### **SECTION 14: Transport information**

### Land transport (ADR/RID)

14.1. UN number:UN 331614.2. UN proper shipping name:Chemical kit

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



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

### Inland waterways transport (ADN)

### Other applicable information (inland waterways transport)

Not tested

### Marine transport (IMDG)

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

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



Marine pollutant:

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

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





according to Regulation (EC) No 1907/2006

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**14.1. UN number:** UN 3316

14.2. UN proper shipping name: CHEMICAL KIT

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



Special Provisions: A44 A163
Limited quantity Passenger: 1 kg
Passenger LQ: Y960
Excepted quantity: E0

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

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

14.6. Special precautions for user

no data available

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

Not relevant

## Other applicable information

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

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

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

### **EU regulatory information**

# **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): 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 07.03.2017

Safety datasheet sections which have been updated: 14

Revision: 12.12.2014

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

Revision: 06.11.2013

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





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# 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 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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# LCK 301 Aluminium, LCK 301 A; 2/4

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

#### 1.1. Product identifier

LCK 301 Aluminium, LCK 301 A; 2/4

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

### Use of the substance/mixture

Water analysis

# 1.3. Details of the supplier of the safety data sheet

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

Unit 1, Chestnut Road Western Industrial Estate

IRL-Dublin 12

Tel. +353 (0)1 4602522 e-Mail: info-ie@hach.com

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

number: service -

### **SECTION 2: Hazards identification**

### 2.1. Classification of the substance or mixture

## Regulation (EC) No. 1272/2008

Hazard categories:

Flammable liquid: Flam. Liq. 3 Acute toxicity: Acute Tox. 4

Specific target organ toxicity - single exposure: STOT SE 1

Hazard Statements:

Flammable liquid and vapour.

Harmful if swallowed, in contact with skin or if inhaled.

Causes damage to organs.

#### 2.2. Label elements

# Regulation (EC) No. 1272/2008

### Hazard components for labelling

methanol

Signal word: Danger

Pictograms:









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# LCK 301 Aluminium, LCK 301 A; 2/4

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#### **Hazard statements**

H226 Flammable liquid and vapour.

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

H370 Causes damage to organs.

#### **Precautionary statements**

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

smokina.

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

P307+P311 IF exposed: Call a POISON CENTER or doctor/physician.

### Additional advice on labelling

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

### 2.3. Other hazards

None known.

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

#### 3.2. Mixtures

#### **Hazardous components**

CAS No	Chemical name				
	EC No	Index No	REACH No		
	Classification according	g to Regulation (EC) No. 1272/2008 [	CLP]		
7732-18-5	Water			>50 %	
	231-791-2				
631-61-8	Ammonium acetate				
	211-162-9				
67-56-1	methanol	18 %			
	200-659-6	603-001-00-X			
	Flam. Liq. 2, Acute Tox. 3, Acute Tox. 3, STOT SE 1; H225 H331 H311 H301 H370 **				
6131-90-4	Sodium acetate	7-10 %			
	204-823-8				
		•	•		

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

# **SECTION 4: First aid measures**

### 4.1. Description of first aid measures

### **General information**

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

### After inhalation

Move to fresh air.

If symptoms persist, call a physician.

### After contact with skin

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

If skin irritation persists, call a physician.





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### LCK 301 Aluminium, LCK 301 A; 2/4

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#### After contact with eyes

In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

#### After ingestion

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

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

irritant effects, Nausea

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

Treat symptomatically.

### **SECTION 5: Firefighting measures**

#### 5.1. Extinguishing media

#### Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

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

Fire may liberate hazardous vapours.

#### 5.3. Advice for firefighters

In order to avoid contact with skin, keep a safety distance and wear suitable protective clothing. In the event of fire, wear self-contained breathing apparatus.

#### Additional information

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

### **SECTION 6: Accidental release measures**

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

Use personal protective equipment.

### 6.2. Environmental precautions

Do not flush into surface water or sanitary sewer system.

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

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

# 6.4. Reference to other sections

13. Disposal considerations

# **SECTION 7: Handling and storage**

# 7.1. Precautions for safe handling

# Advice on safe handling

Use only in well-ventilated areas.

Avoid contact with skin and eyes.

Keep container tightly closed.

### 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.

Keep away from heat and sources of ignition.

### Hints on joint storage

Do not store near combustible materials.

### Further information on storage conditions

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



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### LCK 301 Aluminium, LCK 301 A; 2/4

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

Reagent for analysis

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

#### 8.1. Control parameters

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

CAS No	Substance	ppm	mg/m³	fibres/ml	Category	Origin
67-56-1	Methanol	200	266		TWA (8 h)	WEL
		250	333		STEL (15 min)	WEL

#### 8.2. Exposure controls

### Appropriate engineering controls

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

#### Protective and hygiene measures

Wash hands before breaks and at the end of workday.

### Eye/face protection

Safety glasses with side-shields

### Hand protection

Use barrier skin cream.

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

## Skin protection

Avoid contact with skin, eyes and clothing.

### Respiratory protection

Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction.

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

### 9.1. Information on basic physical and chemical properties

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

pH-Value (at 20 °C): 7,4

# Changes in the physical state

Melting point:

Initial boiling point and boiling range:

Sublimation point:

Softening point:

Pour point:

Flash point:

no data available

not applicable

not applicable

not applicable

30 °C

Flammability

Solid: no data available
Gas: no data available

#### **Explosive properties**

no data available



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Lower explosion limits:

Upper explosion limits:

Ignition temperature:

no data available

no data available

**Auto-ignition temperature** 

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

**Oxidizing properties** 

no data available

Vapour pressure: 128 hPa

(at 20 °C)

Density (at 20 °C):

Bulk density:

Not applicable

Water solubility:

soluble

(at 20 °C)

Solubility in other solvents

no data available

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

9.2. Other information

Solid content: not applicable

# **SECTION 10: Stability and reactivity**

#### 10.1. Reactivity

Vapour/air-mixtures are explosive at intense warming.

### 10.2. Chemical stability

Stable under recommended storage conditions.

### 10.3. Possibility of hazardous reactions

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

## 10.4. Conditions to avoid

Heat, flames and sparks.

### 10.5. Incompatible materials

Magnesium

### 10.6. Hazardous decomposition products

None known.

### **SECTION 11: Toxicological information**

### 11.1. Information on toxicological effects



according to Regulation (EC) No 1907/2006

# LCK 301 Aluminium, LCK 301 A; 2/4

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#### **Acute toxicity**

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

Ingestion may provoke the following symptoms: Nausea, Vomiting, Impairment of vision.

May cause headache and dizziness.

#### **ATEmix** calculated

ATE (oral) 557,1 mg/kg; ATE (dermal) 1659,7 mg/kg; ATE (inhalation aerosol) 2,786 mg/l

CAS No	Chemical name	Chemical name						
	Exposure route	Dose		Species	Source	Method		
67-56-1	methanol							
	oral	LD50 mg/kg	300	Humans				
	dermal	LD50 mg/kg	1000	Humans				
	inhalation (4 h) vapour	LC50	10 mg/l	Humans				
	inhalation aerosol	ATE	0,5 mg/l					

#### Sensitising effects

No known effect.

#### STOT-single exposure

H370 - Causes damage to organs (a,b,c). (methanol)

#### STOT-repeated exposure

The substance or mixture is classified as specific target organ toxicant, repeated exposure, category 1.

#### **Aspiration hazard**

No aspiration toxicity classification

### Specific effects in experiment on an animal

No toxicology information is available.

### **Further information**

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

# **SECTION 12: Ecological information**

### 12.1. Toxicity

No data is available on the product itself.

CAS No	Chemical name						
	Aquatic toxicity	Dose		[h]   [d]	Species	Source	Method
631-61-8	Ammonium acetate						
	Acute fish toxicity	LC50	238 mg/l	96 h			
67-56-1	methanol						
	Acute fish toxicity	LC50 mg/l	15400		Lepomis macrochirus (Bluegill sunfish)		
	Acute algae toxicity	ErC50 mg/l	22000		Pseudokirchneriella subcapitata (green algae)		
	Acute crustacea toxicity	EC50 mg/l	24500	48 h	Crustaceans		

# 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.



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#### Partition coefficient n-octanol/water

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

#### 12.4. Mobility in soil

no data available

# 12.5. Results of PBT and vPvB assessment

no data available

#### 12.6. Other adverse effects

No known effect.

## **SECTION 13: Disposal considerations**

#### 13.1. Waste treatment methods

#### 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

#### Contaminated packaging

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

### **SECTION 14: Transport information**

### Land transport (ADR/RID)

14.1. UN number: UN 3316
14.2. UN proper shipping name: Chemical kit

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



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

# Inland waterways transport (ADN)

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

Not tested





according to Regulation (EC) No 1907/2006

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### Marine transport (IMDG)

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

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



Marine pollutant:

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

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

14.1. UN number: UN 3316

14.2. UN proper shipping name: CHEMICAL KIT

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



Special Provisions: A44 A163
Limited quantity Passenger: 1 kg
Passenger LQ: Y960
Excepted quantity: E0

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

### 14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

# 14.6. Special precautions for user

N06.00116010

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

Not relevant

### Other applicable information

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

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

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

### **EU** regulatory information

Restrictions on use (REACH, annex XVII):

Entry 69: methanol

### **Additional information**

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





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# LCK 301 Aluminium, LCK 301 A; 2/4

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### **National regulatory information**

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

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

nursing mothers.

Water contaminating class (D): 1 - slightly water contaminating

### 15.2. Chemical safety assessment

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

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

#### Changes

Revision: 27.12.2017

This data sheet contains changes from the previous version in section(s): 3, 11

Revision: 07.03.2017

This data sheet contains changes from the previous version in section(s): 14

Revision: 12.12.2014

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

Revision: 09.12.2013

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

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

H225 Highly flammable liquid and vapour. H226 Flammable liquid and vapour.

H301 Toxic if swallowed.

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

H311 Toxic in contact with skin.

H331 Toxic if inhaled.

H370 Causes damage to organs.

## **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.)





according to Regulation (EC) No 1907/2006

LCK 301 Aluminium, LCK 301 B; 3/4

Revision date: 03.05.2018 Product code: LCK301-3 Page 1 of 9

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

#### 1.1. Product identifier

LCK 301 Aluminium, LCK 301 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 Poison Control Center Mainz: Tel: +49 (0) 6131 19240 - 24 hour emergency

number: service -

### **SECTION 2: Hazards identification**

### 2.1. Classification of the substance or mixture

## Regulation (EC) No. 1272/2008

Hazard categories:

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 irritatio

May cause respiratory irritation.

Classification according to European directive on classification of hazardous preparations 1999/45/EC.

### 2.2. Label elements

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

# Hazard components for labelling

Sodium thiosulfate

Signal word: Warning

Pictograms:





according to Regulation (EC) No 1907/2006

### LCK 301 Aluminium, LCK 301 B; 3/4

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#### **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	Chemical name			
	EC No	Index No	REACH No		
	Classification according to Regulation (EC) No. 1272/2008 [CLP]				
50-81-7	Ascorbic acid				
	200-066-2				
7772-98-7	Sodium thiosulfate			50 - < 55 %	
	231-867-5				
	Skin Irrit. 2, Eye Irrit. 2A, STOT SE 3; H315 H319 H335				

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

### **SECTION 4: First aid measures**

### 4.1. Description of first aid measures

### **General information**

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

#### After inhalation

Move to fresh air.

If symptoms persist, call a physician.

#### After contact with skin

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

If skin irritation persists, call a physician.

# After contact with eyes

In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

### After ingestion

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

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

No known effect.



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# **Safety Data Sheet**

HACH LANGE GmbH

according to Regulation (EC) No 1907/2006

### LCK 301 Aluminium, LCK 301 B; 3/4

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#### 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

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

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.

#### Further information on storage conditions

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

# 7.3. Specific end use(s)

Reagent for analysis

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

### 8.1. Control parameters

# 8.2. Exposure controls

#### Appropriate engineering controls

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

### Protective and hygiene measures

Wash hands before breaks and at the end of workday.



according to Regulation (EC) No 1907/2006

# LCK 301 Aluminium, LCK 301 B; 3/4

Revision date: 03.05.2018 Product code: LCK301-3 Page 4 of 9

#### 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. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction.

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

### 9.1. Information on basic physical and chemical properties

Physical state: powder
Colour: colourless
Odour: mild

pH-Value (at 20 °C):

### Changes in the physical state

Melting point:

Initial boiling point and boiling range:

Sublimation point:

Softening point:

Pour point:

Plash point:

no data available

**Flammability** 

Solid: no data available
Gas: no data available

# **Explosive properties**

no data available

Lower explosion limits:

Upper explosion limits:

Ignition temperature:

not applicable

not applicable

**Auto-ignition temperature** 

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

### **Oxidizing properties**

no data available

Vapour pressure:

Vapour pressure:

Density:

Bulk density:

Not applicable

not applicable

not applicable

not applicable

not applicable

substitution of a available

water solubility:

350 g/L

(at 20 °C)

# Solubility in other solvents

no data available



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# **Safety Data Sheet**

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# LCK 301 Aluminium, LCK 301 B; 3/4

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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

To avoid thermal decomposition, do not overheat.

#### 10.5. Incompatible materials

None known.

# 10.6. Hazardous decomposition products

No decomposition if stored and applied as directed.

#### **Further information**

Stable under recommended storage conditions.

# **SECTION 11: Toxicological information**

# 11.1. Information on toxicological effects

### **Acute toxicity**

No data is available on the product itself.

CAS No	Chemical name						
	Exposure route	Dose	Species	Source	Method		
50-81-7	Ascorbic acid						
	oral	LD50 11900 mg/kg	rat	RTECS			
7772-98-7	Sodium thiosulfate						
	oral	LD50 >5000 mg/kg	rat	RTECS			

# Irritation and corrosivity

May cause eye and skin irritation.

## Sensitising effects

No known effect.

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



according to Regulation (EC) No 1907/2006

# LCK 301 Aluminium, LCK 301 B; 3/4

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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.

### **SECTION 12: Ecological information**

#### 12.1. Toxicity

No data is available on the product itself.

CAS No	Chemical name						
	Aquatic toxicity	Dose	[h]   [d]	Species	Source	Method	
7772-98-7	Sodium thiosulfate						
	Acute fish toxicity	LC50 24000 mg/l		Gambusia affinis (Mosquito fish)	IUCLID		

#### 12.2. Persistence and degradability

No data is available on the product itself.

### 12.3. Bioaccumulative potential

No data is available on the product itself.

#### Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
7772-98-7	Sodium thiosulfate	-4,35

### 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

## 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



according to Regulation (EC) No 1907/2006

# LCK 301 Aluminium, LCK 301 B; 3/4

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### Contaminated packaging

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

# **SECTION 14: Transport information**

# Land transport (ADR/RID)

14.1. UN number:UN 331614.2. UN proper shipping name:Chemical kit

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



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

#### Inland waterways transport (ADN)

### Other applicable information (inland waterways transport)

Not tested

#### Marine transport (IMDG)

**14.1. UN number:** UN 3316

14.2. UN proper shipping name: CHEMICAL KIT

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



Marine pollutant:

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

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

**14.1. UN number:** UN 3316

14.2. UN proper shipping name: CHEMICAL KIT

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





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# **Safety Data Sheet**

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LCK 301 Aluminium, LCK 301 B; 3/4

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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

N06.00116010

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

Not relevant

#### Other applicable information

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

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

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

### **EU** regulatory information

### **Additional information**

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

# 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 03.05.2018

Safety datasheet sections which have been updated: 16

Revision Date 07.03.2017

Safety datasheet sections which have been updated: 2, 14,15

Revision: 12.12.2014

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

Revision: 09.12.2013

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]

The contraction for infiction and a contraction in contraction according to regulation (10) from 1212200 [021]						
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.





according to Regulation (EC) No 1907/2006

# LCK 301 Aluminium, LCK 301 B; 3/4

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H335

May cause respiratory irritation.

### **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.)





according to Regulation (EC) No 1907/2006

### LCK 301 Aluminium, Zero solution; 4/4

Revision date: 27.12.2017 Product code: LCK301-4 Page 1 of 9

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

#### 1.1. Product identifier

LCK 301 Aluminium, Zero solution; 4/4

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

### Use of the substance/mixture

Water analysis

### 1.3. Details of the supplier of the safety data sheet

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

Salford Manchester M50 1DL - United Kingdom Tel. +44 (0) 161 872 1487 \* Fax +44 (0) 161 848 7324

e-Mail: info-uk@hach.com

HACH LANGE Ltd.

Unit 1, Chestnut Road Western Industrial Estate

IRL-Dublin 12

Tel. +353 (0)1 4602522 e-Mail: info-ie@hach.com

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

number: service -

### **SECTION 2: Hazards identification**

### 2.1. Classification of the substance or mixture

## Regulation (EC) No. 1272/2008

Hazard categories:

Skin corrosion/irritation: Skin Corr. 1

Serious eye damage/eye irritation: Eye Dam. 1

Hazardous to the aquatic environment: Aquatic Chronic 3

Hazard Statements:

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

### 2.2. Label elements

# Regulation (EC) No. 1272/2008

# Hazard components for labelling

sulphuric acid 1 %, copper sulphate

Signal word: Danger

Pictograms:



#### **Hazard statements**

H314 Causes severe skin burns and eye damage.



according to Regulation (EC) No 1907/2006

### LCK 301 Aluminium, Zero solution; 4/4

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H412 Harmful to aquatic life with long lasting effects.

#### **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				
	EC No	Index No	REACH No		
	Classification according to Regu	lation (EC) No. 1272/2008 [CLP]	•		
7732-18-5	Water			>99 %	
	231-791-2				
				<0,5 %	
7758-98-7	copper sulphate pentahydrate				
	231-847-6	029-004-00-0			
	Acute Tox. 4, Skin Irrit. 2, Eye Irrit. 2, Aquatic Acute 1 (M-Factor = 100), Aquatic Chronic 1 (M-Factor = 100); H302 H315 H319 H400 H410				
7664-93-9	sulphuric acid %			<0,3 %	
	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.

If skin irritation persists, call a physician.

# After contact with eyes

In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

# After ingestion

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



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# **Safety Data Sheet**

HACH LANGE GmbH

according to Regulation (EC) No 1907/2006

### LCK 301 Aluminium, Zero solution; 4/4

Revision date: 27.12.2017 Product code: LCK301-4 Page 3 of 9

person. Obtain medical attention.

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

None known.

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

Treat symptomatically.

### **SECTION 5: Firefighting measures**

#### 5.1. Extinguishing media

### Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

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

Fire may liberate hazardous vapours.

#### 5.3. Advice for firefighters

In order to avoid contact with skin, keep a safety distance and wear suitable protective clothing. In the event of fire, wear self-contained breathing apparatus.

#### Additional information

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

#### **SECTION 6: Accidental release measures**

# 6.1. Personal precautions, protective equipment and emergency procedures

Use personal protective equipment.

### 6.2. Environmental precautions

Do not flush into surface water or sanitary sewer system.

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

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

# 6.4. Reference to other sections

13. Disposal considerations

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

### 7.1. Precautions for safe handling

### Advice on safe handling

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

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

### Requirements for storage rooms and vessels

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

### Hints on joint storage

Do not store near combustible materials.

# 7.3. Specific end use(s)

Reagent for analysis

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

#### 8.1. Control parameters



according to Regulation (EC) No 1907/2006

# LCK 301 Aluminium, Zero solution; 4/4

Revision date: 27.12.2017 Product code: LCK301-4 Page 4 of 9

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

CAS No	Substance	ppm	mg/m³	fibres/ml	Category	Origin	
7664-93-9	Sulphuric acid (mist)	-	0.05		TWA (8 h)	WEL	

#### 8.2. Exposure controls

### Appropriate engineering controls

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

#### Protective and hygiene measures

Wash hands before breaks and at the end of workday.

#### Eye/face protection

Safety glasses with side-shields

#### Hand protection

Use barrier skin cream.

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

#### Skin protection

Avoid contact with skin, eyes and clothing.

#### Respiratory protection

Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction.

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

## 9.1. Information on basic physical and chemical properties

Physical state: liquid
Colour: light blue
Odour: odourless

pH-Value (at 20 °C): <1

### Changes in the physical state

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

### **Flammability**

Solid: not applicable
Gas: not applicable

# **Explosive properties**

not applicable

Lower explosion limits:

Upper explosion limits:

Inot applicable
Inot applicable
Inot applicable
Inot applicable

## **Auto-ignition temperature**

Solid: not applicable Gas: not applicable



according to Regulation (EC) No 1907/2006

# LCK 301 Aluminium, Zero solution; 4/4

Revision date: 27.12.2017 Product code: LCK301-4 Page 5 of 9

Decomposition temperature: not applicable

**Oxidizing properties** 

not applicable

Vapour pressure:no data availableDensity:no data availableBulk density:not applicableWater 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 no data available Vapour density: Evaporation rate: no data available no data available Solvent separation test: Solvent content: no data available

9.2. Other information

Solid content: not applicable

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

### 10.1. Reactivity

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.

# **SECTION 11: Toxicological information**

## 11.1. Information on toxicological effects

## **Acute toxicity**

No toxicology information is available.

CAS No	Chemical name					
	Exposure route	Dose	Species	Source	Method	
7758-98-7	copper sulphate pentahydrate					
	- · · · · ·	ATE 500 mg/kg				



according to Regulation (EC) No 1907/2006

## LCK 301 Aluminium, Zero solution; 4/4

Revision date: 27.12.2017 Product code: LCK301-4 Page 6 of 9

#### Irritation and corrosivity

Causes skin and eye burns.

### Sensitising effects

No known effect.

### Carcinogenic/mutagenic/toxic effects for reproduction

Contains no ingredient listed as a carcinogen

#### STOT-single exposure

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

### STOT-repeated exposure

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

#### **Aspiration hazard**

No aspiration toxicity classification

## Specific effects in experiment on an animal

No toxicology information is available.

#### **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
7758-98-7	copper sulphate pentahyd	rate					
	Acute fish toxicity	LC50	0,11 mg/l		Onchorhynchus mykiss	ECOTOX Database	
	Acute crustacea toxicity	EC50 mg/l	0,0028		Pimephales promelas (fathead minnow)		

### 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

### 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





according to Regulation (EC) No 1907/2006

### LCK 301 Aluminium, Zero solution; 4/4

Revision date: 27.12.2017 Product code: LCK301-4 Page 7 of 9

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

### Contaminated packaging

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

### **SECTION 14: Transport information**

#### Land transport (ADR/RID)

14.1. UN number:UN 331614.2. UN proper shipping name:Chemical kit

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



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

#### Inland waterways transport (ADN)

## Other applicable information (inland waterways transport)

Not tested

# Marine transport (IMDG)

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

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



Marine pollutant:

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

Air transport (ICAO-TI/IATA-DGR)

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





according to Regulation (EC) No 1907/2006

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



Special Provisions: A44 A163
Limited quantity Passenger: 1 kg
Passenger LQ: Y960
Excepted quantity: E0

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

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: yes



Danger releasing substance: sulphuric acid 1 %, copper sulphate

14.6. Special precautions for user

N06.00116010

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

Not relevant

Other applicable information

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

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

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

### **EU** regulatory information

#### **Additional information**

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

**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 27.12.2017

Safety datasheet sections which have been updated: 10, 11

Revision Date 07.03.2017

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

Revision: 12.12.2014

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

Revision: 09.12.2013

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





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

H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

# **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.)