

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### LCK 153 Sulfat/Sulphate/Sulfate, Sample cuvette; 1/2

Revision date: 14.04.2021

Product code: LCK153-1

Page 1 of 9

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

### 1.1. Product identifier

LCK 153 Sulfat/Sulphate/Sulfate, Sample cuvette; 1/2

UFI: EYN5-EF6X-280Y-2CSF

### 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 153 Sulfat/Sulphate/Sulfate, Sample cuvette; 1/2

Revision date: 14.04.2021

Product code: LCK153-1

Page 2 of 9

#### Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	GHS Classification			
7732-18-5	Water			>75 %
	231-791-2			
7647-14-5	Sodium chloride			<25 %
	231-598-3		01-2119485491-33	
7647-01-0	hydrochloric acid ... %			<1 %
	231-595-7	017-002-01-X	01-2119484862-27	
	Skin Corr. 1B, STOT SE 3; H314 H335			

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

#### Specific concentration limits and M-factors

CAS No	EC No	Chemical name	Quantity
		Specific concentration limits and M-factors	
7647-01-0	231-595-7	hydrochloric acid ... %	<1 %
	Skin Corr. 1B; H314: >= 25 - 100 Skin Irrit. 2; H315: >= 10 - < 25 Eye Irrit. 2; H319: >= 10 - < 25 STOT SE 3; H335: >= 10 - 100		

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

##### General information

Take off all contaminated clothing immediately.

##### After inhalation

Move to fresh air.

##### After contact with skin

Wash off immediately with plenty of water.

##### After contact with eyes

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

##### After ingestion

Clean mouth with water and drink afterwards plenty of water.

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

No known effect.

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

Treat symptomatically.

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

##### Suitable extinguishing media

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

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

Fire may liberate hazardous vapours.

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### LCK 153 Sulfat/Sulphate/Sulfate, Sample cuvette; 1/2

Revision date: 14.04.2021

Product code: LCK153-1

Page 3 of 9

#### **5.3. Advice for firefighters**

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

#### **Additional information**

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

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

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

Use personal protective equipment.

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

Do not flush into surface water or sanitary sewer system.

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

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).

#### **6.4. Reference to other sections**

13. Disposal considerations

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

#### **7.1. Precautions for safe handling**

##### **Advice on safe handling**

Use only in well-ventilated areas.

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

See also section 5

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

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

Keep in a dry, cool place.

Storage temperature: 15 - 25°C

##### **Hints on joint storage**

None known.

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

Reagent for analysis

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

#### **8.1. Control parameters**

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

CAS No	Substance	ppm	mg/m <sup>3</sup>	fibres/ml	Category	Origin
7647-01-0	Hydrogen chloride (gas and aerosol mists)	1	2		TWA (8 h)	WEL
		5	8		STEL (15 min)	WEL

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

None known.

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

##### **Appropriate engineering controls**

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

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

The type of protective equipment must be selected according to the concentration and amount of the

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### LCK 153 Sulfat/Sulphate/Sulfate, Sample cuvette; 1/2

Revision date: 14.04.2021

Product code: LCK153-1

Page 4 of 9

dangerous substance at the specific workplace.

Wash hands before breaks and after work.

#### Eye/face protection

Safety glasses with side-shields

#### Hand protection

Use barrier skin cream.

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

Gloves material: Viton, Layer thickness: 0.70 mm, Breakthrough time: >480 min. In splash contact: Glove

material: nitrile rubber, Layer thickness 0,20 mm, Breakthrough time: > 30 min

#### Skin protection

Remove and wash contaminated clothing before re-use.

#### Respiratory protection

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

## SECTION 9: Physical and chemical properties

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

Physical state:	liquid
Colour:	colourless
Odour:	odourless
pH-Value:	2

#### Changes in the physical state

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

#### Flammability

Solid:	not applicable
Gas:	not applicable

#### Explosive properties

not applicable

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

#### Auto-ignition temperature

Solid:	not applicable
Gas:	not applicable

Decomposition temperature: no data available

#### Oxidizing properties

not applicable

Vapour pressure:	no data available
Vapour pressure:	no data available
Density:	1,02 g/cm <sup>3</sup>
Bulk density:	not applicable

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### LCK 153 Sulfat/Sulphate/Sulfate, Sample cuvette; 1/2

Revision date: 14.04.2021

Product code: LCK153-1

Page 5 of 9

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

no data available

## SECTION 10: Stability and reactivity

**10.1. Reactivity**

See also section 10.3

**10.2. Chemical stability**

Stable under recommended storage conditions.

**10.3. Possibility of hazardous reactions**

No dangerous reaction known under conditions of normal use.

**10.4. Conditions to avoid**

Extremes of temperature and direct sunlight.

**10.5. Incompatible materials**

None known.

**10.6. Hazardous decomposition products**

No decomposition if stored and applied as directed.

**Further information**

None known.

## SECTION 11: Toxicological information

**11.1. Information on toxicological effects**

**Acute toxicity**

No data is available on the product itself.

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
7647-14-5	Sodium chloride				
	oral	LD50 mg/kg	3000	Ratte	
	dermal	LD50 mg/kg	>10000	Kaninchen	

**Irritation and corrosivity**

No known effect.

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### LCK 153 Sulfat/Sulphate/Sulfate, Sample cuvette; 1/2

Revision date: 14.04.2021

Product code: LCK153-1

Page 6 of 9

#### Sensitising effects

Contains no substance or substances classified as sensitising.

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

Contains no ingredient listed as a carcinogen

#### STOT-single exposure

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

#### STOT-repeated exposure

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

#### Aspiration hazard

No aspiration toxicity classification

#### Specific effects in experiment on an animal

No data is available on the product itself.

#### Additional information on tests

no data available

#### Practical experience

#### Observations relevant to classification

no data available

#### Other observations

no data available

#### Further information

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

## SECTION 12: Ecological information

### 12.1. Toxicity

No data is available on the product itself.

Do not flush into surface water or sanitary sewer system.

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h]   [d]	Species	Source	Method
7647-14-5	Sodium chloride					
	Acute fish toxicity	LC50 mg/l	7650	96 h	Pimephales promelas	
	Acute crustacea toxicity	EC50 mg/l	1000	48 h	Daphnia magna	

### 12.2. Persistence and degradability

No data is available on the product itself.

### 12.3. Bioaccumulative potential

No data is available on the product itself.

### 12.4. Mobility in soil

no data available

### 12.5. Results of PBT and vPvB assessment

no data available

### 12.6. Other adverse effects

No known effect.

#### Further information

no data available

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### LCK 153 Sulfat/Sulphate/Sulfate, Sample cuvette; 1/2

Revision date: 14.04.2021

Product code: LCK153-1

Page 7 of 9

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

#### Disposal recommendations

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

#### List of Wastes Code - contaminated packaging

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

#### Contaminated packaging

Dispose of as unused product.

## SECTION 14: Transport information

### Land transport (ADR/RID)

**14.1. 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: -  
Tunnel restriction code: E

### 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

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**LCK 153 Sulfat/Sulphate/Sulfate, Sample cuvette; 1/2**

Revision date: 14.04.2021

Product code: LCK153-1

Page 8 of 9

Limited quantity: See SP251  
Excepted quantity: SP340  
EmS: F-A, S-P

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

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



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

**14.5. Environmental hazards**

ENVIRONMENTALLY HAZARDOUS: No

**14.6. Special precautions for user**

no data available

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

not applicable

**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**

Water hazard class (D): 1 - slightly hazardous to water

**15.2. Chemical safety assessment**

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

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

Revision Date 14.04.2021  
Safety datasheet sections which have been updated: 3, 7, 15  
Revision Date 17.03.2020  
Safety datasheet sections which have been updated: 15  
Revision Date 07.03.2017  
Safety datasheet sections which have been updated: 2, 14

Revision: 30.03.2016  
Safety datasheet sections which have been updated: 7



## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### LCK 153 Sulfat/Sulphate/Sulfate, Sample cuvette; 1/2

Revision date: 14.04.2021

Product code: LCK153-1

Page 9 of 9

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

H314 Causes severe skin burns and eye damage.  
H335 May cause respiratory irritation.

#### Further Information

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

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

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**LCK 153 Sulfat/Sulphate/Sulfate, LCK 153 A; 2/2**

Revision date: 14.04.2021

Product code: LCK153-2

Page 1 of 9

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

LCK 153 Sulfat/Sulphate/Sulfate, LCK 153 A; 2/2

Substance name: barium chloride dihydrate  
CAS No: 10326-27-9  
Index No: 056-004-00-8  
EC No: 233-788-1

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

Water analysis

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

Company name: HACH LANGE GmbH  
Street: Willstätterstr. 11  
Place: D-40549 Düsseldorf  
Telephone: +49 (0)211 5288-383  
e-mail: SDS@hach.com  
Internet: www.de.hach.com  
Responsible Department: HACH LANGE Ltd.  
5, Pacific Way  
Salford Manchester M50 1DL - United Kingdom  
Tel. +44 (0) 161 872 1487 \* Fax +44 (0) 161 848 7324  
e-Mail: info-uk@hach.com

HACH LANGE Ltd.  
Unit 1, Chestnut Road Western Industrial Estate  
IRL-Dublin 12  
Tel. +353 (0)1 4602522  
e-Mail: info-ie@hach.com

**1.4. Emergency telephone number:**

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

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

Hazard categories:  
Acute toxicity: Acute Tox. 3  
Acute toxicity: Acute Tox. 4  
Serious eye damage/eye irritation: Eye Irrit. 2  
Hazardous to the aquatic environment: Aquatic Chronic 3  
Hazard Statements:  
Toxic if swallowed.  
Harmful if inhaled.  
Causes serious eye irritation.  
Harmful to aquatic life with long lasting effects.

**2.2. Label elements****Regulation (EC) No. 1272/2008**

Signal word: Danger

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### LCK 153 Sulfat/Sulphate/Sulfate, LCK 153 A; 2/2

Revision date: 14.04.2021

Product code: LCK153-2

Page 2 of 9

#### Pictograms:



#### Hazard statements

- H301 Toxic if swallowed.  
 H319 Causes serious eye irritation.  
 H332 Harmful if inhaled.  
 H412 Harmful to aquatic life with long lasting effects.

#### Precautionary statements

- P261 Avoid breathing dust/fume/gas/mist/vapours/spray.  
 P273 Avoid release to the environment.  
 P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.  
 P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.  
 P337+P313 If eye irritation persists: Get medical advice/attention.  
 P312 Call a POISON CENTER/doctor if you feel unwell.

#### Additional advice on labelling

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

#### 2.3. Other hazards

None known.

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

#### Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	GHS Classification			
10326-27-9	barium chloride dihydrate			100 %
	233-788-1	056-004-00-8		
	Acute Tox. 3, Acute Tox. 4, Eye Irrit. 2, Aquatic Chronic 3; H301 H332 H319 H412			

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. Consult a physician.

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### LCK 153 Sulfat/Sulphate/Sulfate, LCK 153 A; 2/2

Revision date: 14.04.2021

Product code: LCK153-2

Page 3 of 9

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

irritant effects, Cough, Shortness of breath, Irregular cardiac activity

#### **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, cool place.

Storage temperature: 15 - 25°C

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**

##### **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

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### LCK 153 Sulfat/Sulphate/Sulfate, LCK 153 A; 2/2

Revision date: 14.04.2021

Product code: LCK153-2

Page 4 of 9

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 protective gloves

The protective gloves to be used must comply with the specifications of EC directive 2016/425/EC and the resultant standard DIN EN ISO 374-1.

#### 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:	solid
Colour:	white
Odour:	odourless
pH-Value (at 20 °C):	5,2-8,2 (50g/l H <sub>2</sub> O)

#### Changes in the physical state

Melting point:	963 °C
Initial boiling point and boiling range:	1560 °C
Sublimation point:	no data available
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:	not applicable
Upper explosion limits:	not applicable
Ignition temperature:	not applicable

#### Auto-ignition temperature

Solid:	no data available
Gas:	not applicable

Decomposition temperature: &gt; 100 °C

#### Oxidizing properties

not applicable

Vapour pressure: no data available

Density (at 20 °C): 3,86 g/cm<sup>3</sup>Bulk density: 1350 kg/m<sup>3</sup>

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### LCK 153 Sulfat/Sulphate/Sulfate, LCK 153 A; 2/2

Revision date: 14.04.2021

Product code: LCK153-2

Page 5 of 9

Water solubility: 375 g/L  
(at 20 °C)

**Solubility in other solvents**

no data available

Partition coefficient: not applicable

Viscosity / dynamic: not applicable

Viscosity / kinematic: not applicable

Flow time: not applicable

Vapour density: not applicable

Evaporation rate: 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**

Reacts with the following substances: Strong oxidizing agents, Reducing agents, Acids

**10.4. Conditions to avoid**

To avoid thermal decomposition, do not overheat.

**10.5. Incompatible materials**

Acids

Strong oxidizing agents, Reducing agents

**10.6. Hazardous decomposition products**

Hydrogen chloride gas

## SECTION 11: Toxicological information

**11.1. Information on toxicological effects**

**Toxicokinetics, metabolism and distribution**

No toxicology information is available.

**Acute toxicity**

Toxic if swallowed.

Harmful if inhaled.

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
10326-27-9	barium chloride dihydrate				
	oral	LD50 118 mg/kg	Ratte	IUCLID	
	inhalation vapour	ATE 11 mg/l			
	inhalation (4 h) aerosol	LC50 1,1 mg/l	Ratte		

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### LCK 153 Sulfat/Sulphate/Sulfate, LCK 153 A; 2/2

Revision date: 14.04.2021

Product code: LCK153-2

Page 6 of 9

#### Irritation and corrosivity

Causes serious eye irritation.

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

#### Sensitising effects

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

no data available

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

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

#### STOT-single exposure

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

#### STOT-repeated exposure

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

#### Aspiration hazard

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

#### Specific effects in experiment on an animal

Mutagenicity (in vitro mammalian cytogenetic test) negative

Not mutagenic in Ames Test.

#### Additional information on tests

Effects due to ingestion may include: Nausea, Pain, Circulatory collapse, Vertigo, Cardiac irregularities, Fatality

## SECTION 12: Ecological information

### 12.1. Toxicity

Toxic effects on fish and plankton. Do not flush into surface water or sanitary sewer system.

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h]   [d]	Species	Source	Method
10326-27-9	barium chloride dihydrate					
	Acute crustacea toxicity	EC50 mg/l	14,5	48 h	Daphnia magna (Water flea)	IUCLID

### 12.2. Persistence and degradability

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

### 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

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### LCK 153 Sulfat/Sulphate/Sulfate, LCK 153 A; 2/2

Revision date: 14.04.2021

Product code: LCK153-2

Page 7 of 9

#### 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: -  
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



## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### LCK 153 Sulfat/Sulphate/Sulfate, LCK 153 A; 2/2

Revision date: 14.04.2021

Product code: LCK153-2

Page 8 of 9



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

#### 14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

#### 14.6. Special precautions for user

no data available

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

Not relevant

#### Other applicable information

These transport data apply to the entire pack

### SECTION 15: Regulatory information

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

##### EU regulatory information

##### Additional information

Classification according to EU Directives 67/548/EEC or 1999/45/EC

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

##### National regulatory information

Employment restrictions: Observe restrictions to employment for juveniles 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 hazard class (D): 1 - slightly hazardous to water

##### Additional information

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

#### 15.2. Chemical safety assessment

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

### SECTION 16: Other information

#### Changes

Revision Date 14.04.2021

Safety datasheet sections which have been updated: 7, 15

Revision Date 17.03.2020

Safety datasheet sections which have been updated: 2, 3, 4, 11, 15

Revision Date 07.03.2017

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

Revision: 30.03.2016

Safety datasheet sections which have been updated: 7

Revision: 1.10.2014

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### LCK 153 Sulfat/Sulphate/Sulfate, LCK 153 A; 2/2

Revision date: 14.04.2021

Product code: LCK153-2

Page 9 of 9

Safety datasheet sections which have been updated: 2

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

H301	Toxic if swallowed.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
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.