

Safety Data Sheet

according to 2001/58/EC

LCK365 Organische Säuren/Organic Acids/Acides organiques, Sample cuvette; 1/5

Print date : 20.04.2007

Product code : LCK365-1

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1. Identification of the substance/preparation and of the company/undertaking

Identification of the substance or preparation

LCK365 Organische Säuren/Organic Acids/Acides organiques, Sample cuvette; 1/5

Use of the substance/preparation

Water analysis

Company/undertaking identification

Company name : HACH LANGE GmbH
Street : Willstätterstr. 11
Place : D-40549 Düsseldorf

e-mail : info@hach-lange.de
Internet : www.hach-lange.com

Inquiry office : HACH LANGE Ltd.
Pacific Way
Salford Manchester M50 1DL - United Kingdom
Tel. +44 (0) 161 872 1487
e-Mail: info@hach-lange.co.uk

Telephone : +49(0)2115288-0
Telefax : +49(0)2115288-143

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

2. Composition/information on ingredients

Chemical characterization (substance)

Hazardous components

EC-No.	CAS-No.	Chemical name	Quantity	Classification
203-473-3	107-21-1	ethanediol, ethylene glycol	100 %	Xn R22

Full text of each relevant R phrase can be found in heading 16.

Index No. 603-027-00-1

3. Hazards identification

Classification

Indications of danger : Harmful
R-phrases :
Harmful if swallowed.

4. 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.

After contact with skin

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

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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. Show this safety data sheet to the doctor in attendance.

Advice to doctor

Treat symptomatically.

5. Fire-fighting measures

Suitable extinguishing media

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

Special exposure hazards arriving from substance or preparation itself, combustion products, resulting gases

Fire may liberate hazardous vapours.

Special protective equipment for fire-fighters

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.

6. Accidental release measures

Personal precautions

Use personal protective equipment.

Environmental precautions

Do not flush into surface water or sanitary sewer system.

Methods for cleaning up/taking up

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

7. Handling and storage

Handling

Advice on safe handling

Use only in well-ventilated areas.

Storage

Requirements for storage rooms and vessels

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

Further information on storage conditions

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

8. Exposure controls/personal protection

Exposure limit values

Exposure limits (EH40)

CAS No.	Substance	ml/m ³	mg/m ³	F/ml	Category	Origin
107-21-1	Ethane-1,2-diol, vapour	20	52		TWA (8 h)	WEL
		40	104		STEL (15 min)	WEL

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Exposure controls

Protective and hygiene measures

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

Respiratory protection

Breathing apparatus only if aerosol or dust is formed.

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 89/686/EEC and the resultant standard EN374.

Eye protection

Safety glasses with side-shields

Skin protection

Remove and wash contaminated clothing before re-use.

9. Physical and chemical properties

General information

Physical state : liquid
Colour : colourless
Odour : sweet

Important health, safety and environmental information

Changes in the physical state

	Test method
Melting point :	- 13 °C
Boiling point :	197,6 °C
Flash point :	111 °C
Lower explosion limits :	1,8
Upper explosion limits :	12,8
Vapour pressure :	0,053 hPa
	1,11 g/cm ³
	completely soluble

Other information

Ignition temperature : 410 °C

10. Stability and reactivity

Conditions to avoid

No dangerous reaction known under conditions of normal use.

Materials to avoid

bases
oxidizing agents

Hazardous decomposition products

No decomposition if stored and applied as directed.

11. Toxicological information

Acute toxicity

LD50/oral/rat = 4700 mg/kg

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12. Ecological information

Ecotoxicity

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

13. Disposal considerations

Advice on disposal

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

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 dangerous substances, including mixtures of laboratory chemicals
Classified as 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 dangerous substances, including mixtures of laboratory chemicals
Classified as hazardous waste.

14. Transport information

Land transport (ADR/RID)

ADR/RID class : 9
Warning plate
UN number : 3316
ADR/RID packing group : II

Description of the goods

Chemical kit

Inland waterways transport

Remarks (inland waterways transport)

Not tested

Marine transport

IMDG code : 9
UN number : 3316
Marine pollutant : --
EmS : F-A,S-P
IMDG packing group : II

Description of the goods

Chemical kit

Air transport

ICAO/IATA-DGR : 9
UN/ID number : 3316
ICAO packing group : II

Description of the goods

Chemical kit

Further Information

These transport data apply to the entire pack

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15. Regulatory information

Labelling

Danger symbols : Xn - Harmful



Xn - Harmful

Labelling according to EC-guidelines : Classification according to European directive on classification of hazardous preparations 1999/45/EC.

Hazardous component(s) to be indicated on label

ethanediol, ethylene glycol

R phrases

22 Harmful if swallowed.

National regulations

Water contaminating class : 1 - slightly water contaminating

16. Other information

Full text of R-phrases referred to under sections 2 and 3

22 Harmful if swallowed.

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1. Identification of the substance/preparation and of the company/undertaking

Identification of the substance or preparation

LCK365 Organische Säuren/Organic Acids/Acides organiques, LCK 365 A; 2/5

Use of the substance/preparation

Water analysis

Company/undertaking identification

Company name : HACH LANGE GmbH
Street : Willstätterstr. 11
Place : D-40549 Düsseldorf

e-mail : info@hach-lange.de
Internet : www.hach-lange.com

Inquiry office : HACH LANGE Ltd.
Pacific Way
Salford Manchester M50 1DL - United Kingdom
Tel. +44 (0) 161 872 1487
e-Mail: info@hach-lange.co.uk

Telephone : +49(0)2115288-0
Telefax : +49(0)2115288-143

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

2. Composition/information on ingredients

Chemical characterization (preparation)

Hazardous components

EC-No.	CAS-No.	Chemical name	Quantity	Classification
213-791-2	7732-18-5	Water	< 90%	
231-639-5	7664-93-9	sulphuric acid ... %	> 10%	C R35

Full text of each relevant R phrase can be found in heading 16.

3. Hazards identification

Classification

Indications of danger : Irritant
R-phrases :
Irritating to eyes and skin.

4. First aid measures

General information

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

After inhalation

Move to fresh air. Consult a physician after significant exposure.

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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After contact with eyes

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

After ingestion

Do NOT induce vomiting. Drink 1 or 2 glasses of water.
Never give anything by mouth to an unconscious person.
Consult a physician.

Advice to doctor

Treat symptomatically.

5. Fire-fighting measures

Suitable extinguishing media

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

Special exposure hazards arriving from substance or preparation itself, combustion products, resulting gases

The product itself does not burn.
Fire may liberate hazardous vapours.

Special protective equipment for fire-fighters

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.

6. Accidental release measures

Personal precautions

Use personal protective equipment.

Environmental precautions

Dilute with plenty of water.

Methods for cleaning up/taking up

Neutralise with the following product(s): Cover with dry sodium carbonate. pH 6-9
Flush into sewer with plenty of water.

7. Handling and storage

Handling

Advice on safe handling

Avoid contact with skin and eyes. Do not breathe vapours or spray mist. Use only in well-ventilated areas.

Storage

Requirements for storage rooms and vessels

Keep at temperatures between 10 and 25°C.
Keep in a dry place.

Further information on storage conditions

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

8. Exposure controls/personal protection

Exposure limit values

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Exposure controls

Occupational exposure 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.

Respiratory protection

Ensure adequate ventilation, especially in confined areas.

Hand protection

Use barrier skin cream. The selected protective gloves have to satisfy the specifications of EU Directive 89/689/EEC and the standard EN 374 derived from it.

Eye protection

Safety glasses with side-shields

Skin protection

Avoid contact with skin, eyes and clothing.

9. Physical and chemical properties

General information

Physical state : liquid
Colour : colourless
Odour : odourless

Important health, safety and environmental information

	Test method
	< 1
Changes in the physical state	
Boiling point :	112 °C
Flash point :	not applicable
Flammability	
Solid :	not applicable
Gas :	not applicable
Explosive properties	
not applicable	
Water solubility :	1,047 g/cm ³ soluble

10. Stability and reactivity

Conditions to avoid

Extremes of temperature and direct sunlight.

Materials to avoid

Reacts violently with water.

Hazardous decomposition products

Sulphur trioxide

Additional information

Stable under recommended storage conditions.

11. Toxicological information

Acute toxicity

No data is available on the product itself.

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Corrosive and irritant effects

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

12. Ecological information

Ecotoxicity

No data is available on the product itself.

13. Disposal considerations

Advice on disposal

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

Waste disposal number of waste from residues/unused products

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

14. Transport information

Land transport (ADR/RID)

ADR/RID class : 9
Warning plate
UN number : 3316
ADR/RID packing group : II

Description of the goods

Chemical kit

Inland waterways transport

Remarks (inland waterways transport)

Not tested

Marine transport

IMDG code : 9
UN number : 3316
Marine pollutant : --
EmS : F-A,S-P
IMDG packing group : II

Description of the goods

Chemical kit

Air transport

ICAO/IATA-DGR : 9
UN/ID number : 3316
ICAO packing group : II

Description of the goods

Chemical kit

Safety Data Sheet

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Product code : LCK365-2

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Further Information

These transport data apply to the entire pack

15. Regulatory information

Labelling

Danger symbols : Xi - Irritant



Xi - Irritant

Labelling according to EC-guidelines : Classification according to European directive on classification of hazardous preparations 1999/45/EC.

Hazardous component(s) to be indicated on label

sulphuric acid ... %

R phrases

36/38 Irritating to eyes and skin.

S phrases

26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
37/39 Wear suitable gloves and eye/face protection.

National regulations

Water contaminating class : 1 - slightly water contaminating

16. Other information

Full text of R-phrases referred to under sections 2 and 3

35 Causes severe burns.
36/38 Irritating to eyes and skin.

Other data

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.

Safety Data Sheet

according to 2001/58/EC

LCK365 Organische Säuren/Organic Acids/Acides organiques, LCK 365 B; 3/5

Print date : 20.04.2007

Product code : LCK365-3

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1. Identification of the substance/preparation and of the company/undertaking

Identification of the substance or preparation

LCK365 Organische Säuren/Organic Acids/Acides organiques, LCK 365 B; 3/5

Use of the substance/preparation

Water analysis

Company/undertaking identification

Company name : HACH LANGE GmbH
Street : Willstätterstr. 11
Place : D-40549 Düsseldorf

e-mail : info@hach-lange.de
Internet : www.hach-lange.com

Inquiry office : HACH LANGE Ltd.
Pacific Way
Salford Manchester M50 1DL - United Kingdom
Tel. +44 (0) 161 872 1487
e-Mail: info@hach-lange.co.uk

Telephone : +49(0)2115288-0
Telefax : +49(0)2115288-143

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

2. Composition/information on ingredients

Chemical characterization (preparation)

Hazardous components

EC-No.	CAS-No.	Chemical name	Quantity	Classification
213-791-2	7732-18-5	Water	< 90%	
226-798-2	5470-11-1	hydroxylamine hydrochloride, hydroxylammonium chloride	< 5 %	Xn, Xi, N R22-48/22-36/38-43-50

Full text of each relevant R phrase can be found in heading 16.

3. Hazards identification

Classification

Indications of danger : Irritant
R-phrases :
May cause sensitization by skin contact.

4. First aid measures

General information

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

After inhalation

Move to fresh air.

After contact with skin

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Wash off immediately with plenty of water for at least 15 minutes.
If skin irritation persists, call a physician.

After contact with eyes

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

After ingestion

Do NOT induce vomiting. Drink 1 or 2 glasses of water.
Never give anything by mouth to an unconscious person.
Consult a physician.

Advice to doctor

Treat symptomatically.

5. Fire-fighting measures

Suitable extinguishing media

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

Special exposure hazards arising from substance or preparation itself, combustion products, resulting gases

The product itself does not burn.
Fire may liberate hazardous vapours.

Special protective equipment for fire-fighters

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.

6. Accidental release measures

Personal precautions

Use personal protective equipment.

Environmental precautions

Dilute with plenty of water.

Methods for cleaning up/taking up

Neutralise with the following product(s): Cover with dry sodium carbonate. pH 6-9
Flush into sewer with plenty of water.

7. Handling and storage

Handling

Advice on safe handling

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

Storage

Requirements for storage rooms and vessels

Keep at temperatures between 10 and 25°C.
Keep in a dry place.

Further information on storage conditions

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

8. Exposure controls/personal protection

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Exposure limit values

Exposure controls

Occupational exposure 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.

Respiratory protection

Ensure adequate ventilation, especially in confined areas.

Hand protection

Use barrier skin cream.

Chemical resistant protective gloves

The selected protective gloves have to satisfy the specifications of EU Directive 89/689/EEC and the standard EN 374 derived from it.

Eye protection

Safety glasses with side-shields

Skin protection

Avoid contact with skin, eyes and clothing.

9. Physical and chemical properties

General information

Physical state : liquid
Colour : colourless
Odour : odourless

Important health, safety and environmental information

	Test method
	2,5 - 3,5
Changes in the physical state	
Boiling point :	-
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
	1,0 g/cm ³
Water solubility :	completely soluble

10. Stability and reactivity

Conditions to avoid

Extremes of temperature and direct sunlight.

Materials to avoid

No dangerous reaction known under conditions of normal use.

Hazardous decomposition products

No decomposition if used as directed.

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Additional information

Stable under recommended storage conditions.

11. Toxicological information

Acute toxicity

No data is available on the product itself.

Corrosive and irritant effects

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

12. Ecological information

Ecotoxicity

No data is available on the product itself.

13. Disposal considerations

Advice on disposal

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

Waste disposal number of waste from residues/unused products

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

14. Transport information

Land transport (ADR/RID)

ADR/RID class : 9
Warning plate
UN number : 3316
ADR/RID packing group : II

Description of the goods

Chemical kit

Inland waterways transport

Remarks (inland waterways transport)

Not tested

Marine transport

IMDG code : 9
UN number : 3316
Marine pollutant : --
EmS : F-A,S-P
IMDG packing group : II

Description of the goods

Chemical kit

Air transport

Safety Data Sheet

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LCK365 Organische Säuren/Organic Acids/Acides organiques, LCK 365 B; 3/5

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ICAO/IATA-DGR : 9
UN/ID number : 3316
ICAO packing group : II

Description of the goods

Chemical kit

Further Information

These transport data apply to the entire pack

15. Regulatory information

Labelling

Danger symbols : Xi - Irritant



Xi - Irritant

Labelling according to EC-guidelines : Classification according to European directive on classification of hazardous preparations 1999/45/EC.

Hazardous component(s) to be indicated on label

hydroxylamine hydrochloride, hydroxylammonium chloride

R phrases

43 May cause sensitization by skin contact.

S phrases

37 Wear suitable gloves.
24/25 Avoid contact with skin and eyes.

National regulations

Water contaminating class : 3 - highly water contaminating

16. Other information

Full text of R-phrases referred to under sections 2 and 3

22 Harmful if swallowed.
43 May cause sensitization by skin contact.
50 Very toxic to aquatic organisms.
36/38 Irritating to eyes and skin.
48/22 Harmful: danger of serious damage to health by prolonged exposure if swallowed.

Other data

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.

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LCK365 Organische Säuren/Organic Acids/Acides organiques, LCK 365 C; 4/5

Print date : 20.04.2007

Product code : LCK365-4

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1. Identification of the substance/preparation and of the company/undertaking

Identification of the substance or preparation

LCK365 Organische Säuren/Organic Acids/Acides organiques, LCK 365 C; 4/5

Use of the substance/preparation

Water analysis

Company/undertaking identification

Company name : HACH LANGE GmbH
Street : Willstätterstr. 11
Place : D-40549 Düsseldorf

e-mail : info@hach-lange.de
Internet : www.hach-lange.com

Inquiry office : HACH LANGE Ltd.
Pacific Way
Salford Manchester M50 1DL - United Kingdom
Tel. +44 (0) 161 872 1487
e-Mail: info@hach-lange.co.uk

Telephone : +49(0)2115288-0
Telefax : +49(0)2115288-143

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

2. Composition/information on ingredients

Chemical characterization (preparation)

Hazardous components

EC-No.	CAS-No.	Chemical name	Quantity	Classification
213-791-2	7732-18-5	Water	< 80%	
215-185-5	1310-73-2	caustic soda, sodium hydroxide	15 %	C R35

Full text of each relevant R phrase can be found in heading 16.

3. Hazards identification

Classification

Indications of danger : Corrosive
R-phrases :
Causes severe burns.

4. First aid measures

General information

Take off all contaminated clothing immediately.
In the case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
Show this safety data sheet to the doctor in attendance.

After inhalation

Move to fresh air. Consult a physician.

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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

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

After ingestion

Do NOT induce vomiting. Drink 1 or 2 glasses of water.
Never give anything by mouth to an unconscious person.
Consult a physician.

Advice to doctor

Treat symptomatically.

5. Fire-fighting measures

Suitable extinguishing media

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

Special exposure hazards arising from substance or preparation itself, combustion products, resulting gases

The product itself does not burn.
Fire may liberate hazardous vapours.

Special protective equipment for fire-fighters

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.

6. Accidental release measures

Personal precautions

Use personal protective equipment.

Environmental precautions

Do not flush into surface water or sanitary sewer system.

Methods for cleaning up/taking up

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).
Shovel into suitable container for disposal.

7. Handling and storage

Handling

Advice on safe handling

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

Storage

Requirements for storage rooms and vessels

Keep in a dry place.

Further information on storage conditions

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

8. Exposure controls/personal protection

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Exposure limit values

Exposure limits (EH40)

CAS No.	Substance	ml/m ³	mg/m ³	F/ml	Category	Origin
1310-73-2	Sodium hydroxide	-	-		TWA (8 h)	WEL
		-	2		STEL (15 min)	WEL

Exposure controls

Occupational exposure 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.

Respiratory protection

Ensure adequate ventilation, especially in confined areas.

Hand protection

Use barrier skin cream.

Chemical resistant protective gloves

The selected protective gloves have to satisfy the specifications of EU Directive 89/689/EEC and the standard EN 374 derived from it.

Eye protection

Safety glasses with side-shields

Skin protection

Avoid contact with skin, eyes and clothing.

9. Physical and chemical properties

General information

Physical state : liquid
 Colour : colourless
 Odour : odourless

Important health, safety and environmental information

Changes in the physical state

Boiling point :

Test method
> 13

-

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

1,0 g/cm³

Water solubility :

completely soluble

10. Stability and reactivity

Conditions to avoid

Extremes of temperature and direct sunlight.

Safety Data Sheet

according to 2001/58/EC

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Materials to avoid

Gives off hydrogen by reaction with metals.
Incompatible with acids.

Hazardous decomposition products

No decomposition if used as directed.

Additional information

Stable under recommended storage conditions.

11. Toxicological information

Acute toxicity

No data is available on the product itself.

Corrosive and irritant effects

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

12. Ecological information

Ecotoxicity

No data is available on the product itself.

13. Disposal considerations

Advice on disposal

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

Waste disposal number of waste from residues/unused products

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

14. Transport information

Land transport (ADR/RID)

ADR/RID class : 9
Warning plate
UN number : 3316
ADR/RID packing group : II

Description of the goods

Chemical kit

Inland waterways transport

Remarks (inland waterways transport)

Not tested

Marine transport

IMDG code : 9
UN number : 3316
Marine pollutant : --

Safety Data Sheet

according to 2001/58/EC

LCK365 Organische Säuren/Organic Acids/Acides organiques, LCK 365 C; 4/5

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EmS : F-A,S-P
IMDG packing group : II

Description of the goods

Chemical kit

Air transport

ICAO/IATA-DGR : 9
UN/ID number : 3316
ICAO packing group : II

Description of the goods

Chemical kit

Further Information

These transport data apply to the entire pack

15. Regulatory information

Labelling

Danger symbols : C - Corrosive



C - Corrosive

Labelling according to EC-guidelines : Classification according to European directive on classification of hazardous preparations 1999/45/EC.

Hazardous component(s) to be indicated on label

caustic soda, sodium hydroxide

R phrases

35 Causes severe burns.

S phrases

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

45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

37/39 Wear suitable gloves and eye/face protection.

National regulations

Employment restrictions : Observe employment restrictions for young people.

Water contaminating class : 1 - slightly water contaminating

16. Other information

Full text of R-phrases referred to under sections 2 and 3

35 Causes severe burns.

Other data

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.

Safety Data Sheet

according to 2001/58/EC

LCK365 Organische Säuren/Organic Acids/Acides organiques, LCK 365 D; 5/5

Print date : 20.04.2007

Product code : LCK365-5

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1. Identification of the substance/preparation and of the company/undertaking

Identification of the substance or preparation

LCK365 Organische Säuren/Organic Acids/Acides organiques, LCK 365 D; 5/5

Use of the substance/preparation

Water analysis

Company/undertaking identification

Company name : HACH LANGE GmbH
Street : Willstätterstr. 11
Place : D-40549 Düsseldorf

e-mail : info@hach-lange.de
Internet : www.hach-lange.com

Inquiry office : HACH LANGE Ltd.
Pacific Way
Salford Manchester M50 1DL - United Kingdom
Tel. +44 (0) 161 872 1487
e-Mail: info@hach-lange.co.uk

Telephone : +49(0)2115288-0
Telefax : +49(0)2115288-143

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

2. Composition/information on ingredients

Chemical characterization (preparation)

Hazardous components

EC-No.	CAS-No.	Chemical name	Quantity	Classification
213-791-2	7732-18-5	Water	< 90%	
231-639-5	7664-93-9	sulphuric acid ... %	< 5 %	C R35
231-729-4	10025-77-1	Iron(III) chloride hexahydrate	< 5 %	Xn, Xi R22-38-41

Full text of each relevant R phrase can be found in heading 16.

3. Hazards identification

Classification

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

4. First aid measures

General information

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

After inhalation

Move to fresh air. Consult a physician after significant exposure.

After contact with skin

Wash off immediately with plenty of water for at least 15 minutes.
If skin irritation persists, call a physician.

Safety Data Sheet

according to 2001/58/EC

LCK365 Organische Säuren/Organic Acids/Acides organiques, LCK 365 D; 5/5

Print date : 20.04.2007

Product code : LCK365-5

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After contact with eyes

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

After ingestion

Do NOT induce vomiting. Drink 1 or 2 glasses of water.
Never give anything by mouth to an unconscious person.
Consult a physician.

Advice to doctor

Treat symptomatically.

5. Fire-fighting measures

Suitable extinguishing media

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

Special exposure hazards arriving from substance or preparation itself, combustion products, resulting gases

The product itself does not burn.
Fire may liberate hazardous vapours.

Special protective equipment for fire-fighters

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.

6. Accidental release measures

Personal precautions

Use personal protective equipment.

Environmental precautions

Dilute with plenty of water.

Methods for cleaning up/taking up

Neutralise with the following product(s): Cover with dry sodium carbonate. pH 6-9
Flush into sewer with plenty of water.

7. Handling and storage

Handling

Advice on safe handling

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

Storage

Requirements for storage rooms and vessels

Keep in a dry place.

Further information on storage conditions

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

8. Exposure controls/personal protection

Exposure limit values

Exposure controls

Safety Data Sheet

according to 2001/58/EC

LCK365 Organische Säuren/Organic Acids/Acides organiques, LCK 365 D; 5/5

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Occupational exposure 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.

Respiratory protection

Ensure adequate ventilation, especially in confined areas.

Hand protection

Use barrier skin cream. The selected protective gloves have to satisfy the specifications of EU Directive 89/689/EEC and the standard EN 374 derived from it.

Eye protection

Safety glasses with side-shields

Skin protection

Avoid contact with skin, eyes and clothing.

9. Physical and chemical properties

General information

Physical state : liquid
Colour : colourless
Odour : odourless

Important health, safety and environmental information

	Test method
	< 2
Changes in the physical state	
Boiling point :	-
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
Water solubility :	1,00 g/cm ³ soluble

10. Stability and reactivity

Conditions to avoid

Extremes of temperature and direct sunlight.

Materials to avoid

Reacts violently with water.

Hazardous decomposition products

Sulphur trioxide

Additional information

Stable under recommended storage conditions.

11. Toxicological information

Safety Data Sheet

according to 2001/58/EC

LCK365 Organische Säuren/Organic Acids/Acides organiques, LCK 365 D; 5/5

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Acute toxicity

No data is available on the product itself.

Corrosive and irritant effects

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

12. Ecological information

Ecotoxicity

No data is available on the product itself.

13. Disposal considerations

Advice on disposal

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

Waste disposal number of waste from residues/unused products

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Waste disposal number of used product

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Classified as hazardous waste.

14. Transport information

Land transport (ADR/RID)

ADR/RID class : 9
Warning plate
UN number : 3316
ADR/RID packing group : II

Description of the goods

Chemical kit

Inland waterways transport

Remarks (inland waterways transport)

Not tested

Marine transport

IMDG code : 9
UN number : 3316
Marine pollutant : --
IMDG packing group : II

Description of the goods

Chemical kit

Air transport

ICAO/IATA-DGR : 9
UN/ID number : 3316
ICAO packing group : II

Description of the goods

Chemical kit

Safety Data Sheet

according to 2001/58/EC

LCK365 Organische Säuren/Organic Acids/Acides organiques, LCK 365 D; 5/5

Print date : 20.04.2007

Product code : LCK365-5

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Further Information

These transport data apply to the entire pack

15. Regulatory information

Labelling

Labelling according to EC-guidelines : Classification according to European directive on classification of hazardous preparations 1999/45/EC.

Additional information on EC regulations

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

National regulations

Water contaminating class : 1 - slightly water contaminating

16. Other information

Full text of R-phrases referred to under sections 2 and 3

- | | |
|----|---------------------------------|
| 22 | Harmful if swallowed. |
| 35 | Causes severe burns. |
| 38 | Irritating to skin. |
| 41 | Risk of serious damage to eyes. |

Other data

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.