

# Safety Data Sheet

according to 2001/58/EC

## LCK 529 Kupfer/Copper/Cuivre, Sample cuvette; 1/2

Print date : 20.04.2007

Product code : LCK529-1

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

#### Identification of the substance or preparation

LCK 529 Kupfer/Copper/Cuivre, Sample cuvette; 1/2

#### 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

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Pacific Way  
Salford Manchester M50 1DL - United Kingdom  
Tel. +44 (0) 161 872 1487  
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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
200-066-2	50-81-7	Ascorbic acid	50-60 %	
200-711-8	69-65-8	D(-)-Mannitol	30-40 %	

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

### 3. Hazards identification

#### Classification

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

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 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

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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

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.

#### 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

Fire may liberate hazardous vapours.

#### Special protective equipment for fire-fighters

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.

## 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

Use mechanical handling equipment. Keep in suitable, closed containers for disposal.

## 7. Handling and storage

### Handling

#### Advice on safe handling

Avoid contact with skin and eyes.

### Storage

#### Requirements for storage rooms and vessels

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

## 8. Exposure controls/personal protection

### 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.

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#### Protective and hygiene measures

Wash hands before breaks and at the end of workday.

#### Respiratory protection

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

#### 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 : solid  
Colour : white  
Odour : odourless

#### Important health, safety and environmental information

Test method

#### Changes in the physical state

Flash point : not applicable

#### Explosive properties

not applicable

soluble

### 10. Stability and reactivity

#### Additional information

Stable under recommended storage conditions.

### 11. Toxicological information

#### Acute toxicity

Ascorbinsäure LD50/dermal/rat = 11900mg/kg  
Mannit LD50/dermal/rat = 13500mg/kg

### 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

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

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according to 2001/58/EC

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#### 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.

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

## 14. Transport information

### Land transport (ADR/RID)

#### Remarks (land transport)

Not subject to transport regulations.

### Inland waterways transport

#### Remarks (inland waterways transport)

Not tested

### Marine transport

#### Remarks (marine transport)

Not subject to transport regulations.

### Air transport

#### Remarks (air transport)

Not subject to transport regulations.

## 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 : 2 - water contaminating

## 16. Other information

### 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.

*(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 2001/58/EC

### LCK 529 Kupfer/Copper/Cuivre, LCK 529 A; 2/2

Print date : 20.04.2007

Product code : LCK529-2

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

### Identification of the substance or preparation

LCK 529 Kupfer/Copper/Cuivre, LCK 529 A; 2/2

### 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

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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 %	
201-069-1	77-92-9	Citric acid	< 2 %	Xi R36

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

## 3. Hazards identification

### Classification

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

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 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

## Safety Data Sheet

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### LCK 529 Kupfer/Copper/Cuivre, LCK 529 A; 2/2

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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

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.

#### 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

Fire may liberate hazardous vapours.

#### Special protective equipment for fire-fighters

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.

## 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).  
Keep in suitable, closed containers for disposal.

## 7. Handling and storage

### Handling

#### Advice on safe handling

Avoid contact with skin and eyes.

### Storage

#### Requirements for storage rooms and vessels

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

## 8. Exposure controls/personal protection

### 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.

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### LCK 529 Kupfer/Copper/Cuivre, LCK 529 A; 2/2

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Product code : LCK529-2

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#### Protective and hygiene measures

Wash hands before breaks and at the end of workday.

#### Respiratory protection

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

#### 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

<9

#### Changes in the physical state

Flash point :

not applicable

#### Explosive properties

not applicable

1,1 g/cm<sup>3</sup>  
soluble

### 10. Stability and reactivity

#### Additional information

Stable under recommended storage conditions.

### 11. Toxicological information

#### Acute toxicity

No data is available on the product itself.

### 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

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

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#### Waste disposal number of used product

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

## 14. Transport information

### Land transport (ADR/RID)

#### Remarks (land transport)

Not subject to transport regulations.

### Inland waterways transport

#### Remarks (inland waterways transport)

Not tested

### Marine transport

#### Remarks (marine transport)

Not subject to transport regulations.

### Air transport

#### Remarks (air transport)

Not subject to transport regulations.

## 15. Regulatory information

### Labelling

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

36 Irritating 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.

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