

Safety Data Sheet

according to 2001/58/EC

LCK 238 LatoN, Sample cuvette, 1/5

Print date : 19.04.2007

Product code : LCK238-1

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

Identification of the substance or preparation

LCK 238 LatoN, 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
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Telephone : +49(0)2115288-0
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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
231-639-5	7664-93-9	sulphuric acid ... %	60 %	C R35
231-633-2	7664-38-2	phosphoric acid ... %, orthophosphoric acid ... %	33 %	C R34
213-791-2	7732-18-5	Water	7 %	

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.
Consult a physician. Show this safety data sheet to the doctor in attendance.

After inhalation

Move to fresh air.

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After contact with skin

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

After contact with eyes

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. Show this safety data sheet to the doctor in attendance.

After ingestion

Clean mouth with water and drink afterwards plenty of water. Do NOT induce vomiting. Consult a physician. Show this safety data sheet to the doctor in attendance.

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 arising from substance or preparation itself, combustion products, resulting gases

Fire may liberate hazardous vapours. The following may develop in event of fire: sulfur oxides.

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 and dispose of as hazardous waste.

7. Handling and storage

Handling

Advice on safe handling

Use only in well-ventilated areas. Do not breathe vapours/dust.

Storage

Requirements for storage rooms and vessels

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

8. Exposure controls/personal protection

Exposure limit values

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Exposure limits (EH40)

CAS No.	Substance	ml/m ³	mg/m ³	F/ml	Category	Origin
7664-38-2	Orthophosphoric acid	-	1		TWA (8 h)	WEL
		-	2		STEL (15 min)	WEL

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 : odourless

Important health, safety and environmental information

Test method

<1

Changes in the physical state

Flash point : not applicable
 Lower explosion limits : not applicable
 Upper explosion limits : not applicable
 1,78 g/cm³
 completely soluble

10. Stability and reactivity

Conditions to avoid

To avoid thermal decomposition, do not overheat. Above 300 °C, hazardous fumes may be released.
 Gives off hydrogen by reaction with metals.

Materials to avoid

metals

Hazardous decomposition products

Sulphur trioxide

Additional information

very reactive

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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

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

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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

sulphuric acid ... %

phosphoric acid ... %, orthophosphoric acid ... %

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

Water contaminating class :

1 - slightly water contaminating

16. Other information

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

34 Causes burns.

35 Causes severe burns.

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LCK 238 LatoN, LCK 238 A; 2/5

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Product code : LCK238-2

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

Identification of the substance or preparation

LCK 238 LatoN, LCK 238 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

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HACH LANGE Ltd.
Unit 1, Chestnut Road Western Industrial Estate
Dublin 12 - Ireland
Tel. +353 (0)1 4602522
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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	>98 %	
215-185-5	1310-73-2	caustic soda, sodium hydroxide	<2 %	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.

After inhalation

Move to fresh air.

After contact with skin

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

After ingestion

Clean mouth with water and drink afterwards plenty of water.

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 and dispose of as hazardous waste.

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.

8. Exposure controls/personal protection

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

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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

9. Physical and chemical properties

General information

Physical state : liquid
Colour : colourless
Odour : odourless

Important health, safety and environmental information

Test method

10

Changes in the physical state

Flash point : not applicable
Lower explosion limits : not applicable
Upper explosion limits : not applicable
1,03 g/cm³
completely soluble

10. Stability and reactivity

Conditions to avoid

No dangerous reaction known under conditions of normal use.

Materials to avoid

No dangerous reaction known under conditions of normal use.

Hazardous decomposition products

No decomposition if stored and applied as directed.

11. Toxicological information

Acute toxicity

No data is available on the product itself.

Specific effects in experiment on an animal

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

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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

15. Regulatory information

Labelling

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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

caustic soda, sodium hydroxide

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 : - - not 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.

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according to 2001/58/EC

LCK 238 LatoN, LCK 238 B; 3/5

Print date : 19.04.2007

Product code : LCK238-3

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

Identification of the substance or preparation

LCK 238 LatoN, LCK 238 B; 3/5

Use of the substance/preparation

Water analysis

Company/undertaking identification

Company name : HACH LANGE GmbH
Street : Willstätterstr. 11
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2. Composition/information on ingredients

Chemical characterization (preparation)

Hazardous components

EC-No.	CAS-No.	Chemical name	Quantity	Classification
231-781-8	7727-21-1	dipotassium peroxodisulphate, potassium persulphate	65 %	O, Xn, Xi R8-22-36/37/38-42/43
231-891-6	10555-76-7	Sodium metatobate	20 %	Xi R36/37/38

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

3. Hazards identification

Classification

Indications of danger : Harmful, Irritant

R-phrases :

Harmful if swallowed.

Irritating to eyes, respiratory system and skin.

May cause sensitization by inhalation and skin contact.

4. First aid measures

General information

Take off all contaminated clothing immediately.

After inhalation

Move to fresh air.

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according to 2001/58/EC

LCK 238 LatoN, LCK 238 B; 3/5

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After contact with skin

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

After contact with eyes

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

After ingestion

Clean mouth with water and drink afterwards plenty of water.

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. Use personal protective equipment.

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.

7. Handling and storage

Handling

Advice on safe handling

Use only in well-ventilated areas.

Storage

Requirements for storage rooms and vessels

Keep in a dry, cool place.

8. Exposure controls/personal protection

Exposure limit values

Exposure limits (EH40)

CAS No.	Substance	ml/m ³	mg/m ³	F/ml	Category	Origin
7727-21-1	Dipotassium peroxodisulphate (measured as [S208]) (OLD)	-	1		TWA (8 h)	OES
		-	-		STEL (15 min)	OES

Safety Data Sheet

according to 2001/58/EC

LCK 238 LatoN, LCK 238 B; 3/5

Print date : 19.04.2007

Product code : LCK238-3

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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.

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

9. Physical and chemical properties

General information

Physical state : tablet
Colour : white
Odour : odourless

Important health, safety and environmental information

Test method

5,5 (5 % solution)

Changes in the physical state

Flash point : not applicable
Lower explosion limits : not applicable
Upper explosion limits : not applicable
completely soluble

10. Stability and reactivity

Conditions to avoid

No dangerous reaction known under conditions of normal use.

Hazardous decomposition products

No decomposition if used as directed.

11. Toxicological information

Acute toxicity

No data is available on the product itself.

Specific effects in experiment on an animal

No data is available on the product itself.

Corrosive and irritant effects

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

Sensitising effects

May cause sensitization by inhalation and skin contact.

12. Ecological information

Ecotoxicity

Do not flush into surface water or sanitary sewer system.

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according to 2001/58/EC

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Product code : LCK238-3

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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

15. Regulatory information

Labelling

Danger symbols : Xn - Harmful

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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

dipotassium peroxodisulphate, potassium persulphate

R phrases

- 22 Harmful if swallowed.
- 36/37/38 Irritating to eyes, respiratory system and skin.
- 42/43 May cause sensitization by inhalation and skin contact.

S phrases

- 24 Avoid contact with skin.
- 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

- 08 Contact with combustible material may cause fire.
- 22 Harmful if swallowed.
- 36/37/38 Irritating to eyes, respiratory system and skin.
- 42/43 May cause sensitization by inhalation and skin contact.

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according to 2001/58/EC

LCK 238 LatoN, MicroCap C; 4/5

Print date : 19.04.2007

Product code : LCK238-4

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

Identification of the substance or preparation

LCK 238 LatoN, MicroCap 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
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HACH LANGE Ltd.
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2. Composition/information on ingredients

Chemical characterization (preparation)

Hazardous components

EC-No.	CAS-No.	Chemical name	Quantity	Classification
231-821-4	7757-83-7	Sodium sulfite	>70 %	
247-852-1	26628-22-8	sodium azide	<0,7 %	T+, N R28-32-50-53

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

3. Hazards identification

Classification

Indications of danger : Harmful

R-phrases :

Harmful if swallowed.

Contact with acids liberates very toxic gas.

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

4. First aid measures

General information

Take off all contaminated clothing immediately.

After inhalation

Move to fresh air. Call a physician immediately. Show this safety data sheet to the doctor in attendance.

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After contact with skin

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

After contact with eyes

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

After ingestion

Clean mouth with water and drink afterwards plenty of water. Call a physician immediately. 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.

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. Use personal protective equipment.

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.

7. Handling and storage

Handling

Advice on safe handling

Use only in well-ventilated areas.

Storage

Requirements for storage rooms and vessels

Keep in a dry, cool place.

8. Exposure controls/personal protection

Exposure limit values

Exposure limits (EH40)

CAS No.	Substance	ml/m ³	mg/m ³	F/ml	Category	Origin
26628-22-8	Sodium azide (as NaN ₃)	-	0.1		TWA (8 h)	WEL
		-	0.3		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

9. Physical and chemical properties

General information

Physical state : solid
Colour : white
Odour : odourless

Important health, safety and environmental information

Changes in the physical state

Flash point :	not applicable
Lower explosion limits :	not applicable
Upper explosion limits :	not applicable
	completely soluble

Test method

10 (5 % solution)

10. Stability and reactivity

Conditions to avoid

No dangerous reaction known under conditions of normal use.

Materials to avoid

acids, oxidizing agents

Hazardous decomposition products

Sulphur oxides, nitrogen oxides (NO_x)
Contact with acids liberates toxic gas.

11. Toxicological information

Acute toxicity

No data is available on the product itself.

Sodium azide/ hydrazoic acid causes a profound lowering of blood pressure and inhibits cellular respiration.

Specific effects in experiment on an animal

No data is available on the product itself.

Animal experiments with sodium azide showed lesions of central nervous system, blurred vision and impaired coordination.

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Additional information on tests

No dangerous reaction known under conditions of normal use.

12. Ecological information

Ecotoxicity

No dangerous reaction known under conditions of normal use.
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

Safety Data Sheet

according to 2001/58/EC

LCK 238 LatoN, MicroCap C; 4/5

Print date : 19.04.2007

Product code : LCK238-4

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Further Information

These transport data apply to the entire pack

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

sodium azide

R phrases

- 22 Harmful if swallowed.
- 32 Contact with acids liberates very toxic gas.
- 52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S phrases

- 28 After contact with skin, wash immediately with plenty of water .
- 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
- 61 Avoid release to the environment. Refer to special instructions / Safety data sheets.

National regulations

Water contaminating class : 2 - water contaminating

16. Other information

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

- 22 Harmful if swallowed.
- 28 Very toxic if swallowed.
- 32 Contact with acids liberates very toxic gas.
- 50 Very toxic to aquatic organisms.
- 53 May cause long-term adverse effects in the aquatic environment.
- 52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety Data Sheet

according to 2001/58/EC

LCK 238 LatoN, LCK 238 D; 5/5

Print date : 19.04.2007

Product code : LCK238-5

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

Identification of the substance or preparation

LCK 238 LatoN, LCK 238 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	>75 %	
200-661-7	67-63-0	isopropanol, isopropyl alcohol, propan-2-ol	20 %	F, Xi R11-36-67
209-400-1	576-26-1	2,6-xylenol	<1 %	T, C, N R24/25-34-51-53
204-662-3	123-92-2	isopentyl acetate	<1 %	R10-66

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

3. Hazards identification

Classification

Indications of danger : Irritant

R-phrases :

Flammable.

Irritating to eyes.

4. First aid measures

General information

Take off all contaminated clothing immediately.

After inhalation

Move to fresh air.

Safety Data Sheet

according to 2001/58/EC

LCK 238 LatoN, LCK 238 D; 5/5

Print date : 19.04.2007

Product code : LCK238-5

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After contact with skin

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

After contact with eyes

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. Show this safety data sheet to the doctor in attendance.

After ingestion

Clean mouth with water and drink afterwards plenty of water. Do NOT induce vomiting.
Consult a physician. Show this safety data sheet to the doctor in attendance.

Advice to doctor

Treat symptomatically.

5. Fire-fighting measures

Suitable extinguishing media

carbon dioxide (CO₂), foam, dry powder

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 and dispose of as hazardous waste.

7. Handling and storage

Handling

Advice on safe handling

Use only in well-ventilated areas. Do not breathe vapours/dust.

Storage

Requirements for storage rooms and vessels

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

8. Exposure controls/personal protection

Exposure limit values

Safety Data Sheet

according to 2001/58/EC

LCK 238 LatoN, LCK 238 D; 5/5

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Product code : LCK238-5

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Exposure limits (EH40)

CAS No.	Substance	ml/m ³	mg/m ³	F/ml	Category	Origin
123-92-2	Pentyl acetates	50	270		TWA (8 h)	WEL
		100	541		STEL (15 min)	WEL
67-63-0	Propan-2-ol	400	999		TWA (8 h)	WEL
		500	1250		STEL (15 min)	WEL

BAT values (TRGS 903)

CAS No.	Substance	Value	Parameter	Test material	Sampling time
67-63-0	2-Propanol	50 mg/l	Aceton	B	b

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 : aromatic

Important health, safety and environmental information

pH-Value (at 20 °C) :	5,5	Test method
Changes in the physical state		
Boiling point :	82 °C	
Flash point :	26 °C	DIN 51755
Lower explosion limits :	not applicable	
Upper explosion limits :	not applicable	
Vapour pressure :	2-Prop. 43 hPa	
(at 20 °C)		
Density (at 20 °C) :	0,95 g/cm ³	
Water solubility :	completely soluble	
(at 20 °C)		

10. Stability and reactivity

Safety Data Sheet

according to 2001/58/EC

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Conditions to avoid

No dangerous reaction known under conditions of normal use.

Hazardous decomposition products

No decomposition if used as directed.

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

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

Safety Data Sheet

according to 2001/58/EC

LCK 238 LatoN, LCK 238 D; 5/5

Print date : 19.04.2007

Product code : LCK238-5

Page 5 of 5

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 : 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

isopropanol, isopropyl alcohol, propan-2-ol

R phrases

10 Flammable.
36 Irritating to eyes.

S phrases

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

10 Flammable.
11 Highly flammable.
34 Causes burns.
36 Irritating to eyes.
51 Toxic to aquatic organisms.
53 May cause long-term adverse effects in the aquatic environment.
66 Repeated exposure may cause skin dryness or cracking.
67 Vapours may cause drowsiness and dizziness.
24/25 Toxic in contact with skin and if swallowed.