

Safety Data Sheet

according to Regulation (EC) No 1907/2006

LCK 337 Nickel, Sample cuvette; 1/2

Revision date: 12.06.2018

Product code: LCK337-1

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

LCK 337 Nickel, Sample cuvette; 1/2

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

Water analysis

1.3. Details of the supplier of the safety data sheet

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

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

1.4. Emergency telephone number:

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

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

Hazard categories:

Acute toxicity: Acute Tox. 4

Skin corrosion/irritation: Skin Irrit. 2

Serious eye damage/eye irritation: Eye Irrit. 2

Respiratory or skin sensitisation: Resp. Sens. 1

Respiratory or skin sensitisation: Skin Sens. 1

Specific target organ toxicity - single exposure: STOT SE 3

Hazard Statements:

Harmful if swallowed.

Causes skin irritation.

Causes serious eye irritation.

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

May cause an allergic skin reaction.

May cause respiratory irritation.

2.2. Label elements**Regulation (EC) No. 1272/2008****Hazard components for labelling**

diammonium peroxodisulphate; ammonium persulphate

Citric acid

Signal word:

Danger

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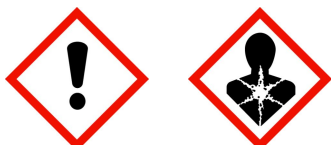
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Pictograms:



Hazard statements

| | |
|------|--|
| H302 | Harmful if swallowed. |
| H334 | May cause allergy or asthma symptoms or breathing difficulties if inhaled. |
| H335 | May cause respiratory irritation. |
| H319 | Causes serious eye irritation. |
| H315 | Causes skin irritation. |
| H317 | May cause an allergic skin reaction. |

Precautionary statements

| | |
|-----------|---|
| P201 | Obtain special instructions before use. |
| P280 | Wear protective gloves/protective clothing/eye protection/face protection. |
| P210 | Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. |
| P304+P341 | IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. |
| P308+P313 | IF exposed or concerned: Get medical advice/attention. |
| P342+P311 | If experiencing respiratory symptoms: Call a POISON CENTER/doctor. |

Additional advice on labelling

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

2.3. Other hazards

no data available

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous components

| CAS No | Chemical name | | | Quantity |
|-----------|--|--------------|----------|-----------|
| | EC No | Index No | REACH No | |
| | GHS Classification | | | |
| 7727-54-0 | diammonium peroxodisulphate; ammonium persulphate | | | < 70 % |
| | 231-786-5 | 016-060-00-6 | | |
| | Ox. Sol. 3, Acute Tox. 4, Skin Irrit. 2, Eye Irrit. 2, Resp. Sens. 1, Skin Sens. 1, STOT SE 3; H272 H302 H315 H319 H334 H317 H335 | | | |
| 77-92-9 | Citric acid | | | 35 - 40 % |
| | 201-069-1 | | | |
| | Skin Irrit. 2, Eye Irrit. 2; H315 H319 | | | |

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

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

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

After inhalation

Move to fresh air.

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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.

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

Irritation and corrosion

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media**Suitable extinguishing media**

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

Unsuitable extinguishing media

High volume water jet

5.2. Special hazards arising from the substance or mixture

The following may develop in event of fire: sulfur oxides., Carbon monoxide, Carbon dioxide (CO₂).

5.3. Advice for firefighters

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.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Use personal protective equipment.

6.2. Environmental precautions

Do not flush into surface water or sanitary sewer system.

6.3. Methods and material for containment and cleaning up

Sweep up or vacuum up spillage and collect in suitable container for disposal.

6.4. Reference to other sections

13. Disposal considerations

SECTION 7: Handling and storage

7.1. Precautions for safe handling**Advice on safe handling**

Avoid contact with skin and eyes.

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

Advice on protection against fire and explosion

None known.

See also section 5

Further information on handling

Observe label precautions.

7.2. Conditions for safe storage, including any incompatibilities

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Requirements for storage rooms and vessels

Keep at temperatures between 15 and 25 °C.

Keep containers dry and tightly closed to avoid moisture absorption and contamination.

Hints on joint storage

None known.

7.3. Specific end use(s)

Reagent for analysis

SECTION 8: Exposure controls/personal protection**8.1. Control parameters****Exposure limits (EH40)**

| CAS No | Substance | ppm | mg/m ³ | fibres/ml | Category | Origin |
|-----------|--|-----|-------------------|-----------|-----------|--------|
| 7727-54-0 | (OLD) Diammonium peroxodisulphate (measured as [S2O8]) | - | 1 | | TWA (8 h) | OES |

Additional advice on limit values

None known.

8.2. Exposure controls**Appropriate engineering controls**

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

Protective and hygiene measures

Wash hands before breaks and at the end of workday.

Eye/face protection

Safety glasses with side-shields

Hand protection

Use barrier skin cream.

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

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

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

Skin protection

Avoid contact with skin, eyes and clothing.

Respiratory protection

Provide adequate ventilation.

Environmental exposure controls

Prevent further leakage or spillage if safe to do so.

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

Physical state: solid (lyophilised)

Colour: white

Odour: odourless

Test method

pH-Value: not applicable

Changes in the physical state

Melting point: 60 °C Decomposition temperature

Initial boiling point and boiling range: not applicable

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Sublimation point: no data available
 Softening point: no data available
 Pour point: no data available
 : no data available

Flash point: not applicable

Flammability

Solid: not applicable

Gas: not applicable

Explosive properties

not applicable

Lower explosion limits: not applicable

Upper explosion limits: not applicable

Ignition temperature: no data available

Auto-ignition temperature

Solid: no data available

Gas: no data available

Decomposition temperature: no data available

Oxidizing properties

no data available

Vapour pressure: no data available

Vapour pressure: no data available

Density: no data available

Bulk density: no data available

Water solubility: completely soluble
 (at 20 °C)

Solubility in other solvents

no data available

Partition coefficient: not applicable

Viscosity / dynamic: not applicable

Viscosity / kinematic: not applicable

Flow time: not applicable

Vapour density: no data available

Evaporation rate: no data available

Solvent separation test: not applicable

Solvent content: not applicable

9.2. Other information

Solid content: no data available

no data available

SECTION 10: Stability and reactivity**10.1. Reactivity**

See also section 10.3

10.2. Chemical stability

Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

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Exothermic reaction: Iron, Zinc, Copper, Silver, Powdered metals
 Incompatible with bases.
 Keep away from combustible materials.

10.4. Conditions to avoid

Keep away from combustible material.
 To avoid thermal decomposition, do not overheat.

10.5. Incompatible materials

Strong bases, Oxidizing agents

10.6. Hazardous decomposition products

Carbon dioxide (CO₂), Sulphur oxides, Ammonia

Further information

Stable under recommended storage conditions.

SECTION 11: Toxicological information**11.1. Information on toxicological effects****Toxicokinetics, metabolism and distribution**

Angaben zur Toxikologie liegen nicht vor.

Acute toxicity

No data is available on the product itself.

| CAS No | Chemical name | | | | |
|-----------|---|---------------|---------|--------|--------|
| | Exposure route | Dose | Species | Source | Method |
| 7727-54-0 | diammonium peroxodisulphate; ammonium persulphate | | | | |
| | oral | LD50 mg/kg | 689 | Rat | GESTIS |
| 77-92-9 | Citric acid | | | | |
| | oral | LD50 mg/kg | 3000 | rat | IUCLID |
| | dermal | LD50 mg/kg | >2000 | rat | IUCLID |

Irritation and corrosivity

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

Sensitising effects

May cause sensitisation by skin contact.
 May cause sensitisation by inhalation.

Carcinogenic/mutagenic/toxic effects for reproduction

Contains no ingredient listed as a carcinogen

STOT-single exposure

The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with respiratory tract irritation.

STOT-repeated exposure

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

Aspiration hazard

No aspiration toxicity classification

Specific effects in experiment on an animal

No toxicology information is available.

Additional information on tests

None known.

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Further information

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

SECTION 12: Ecological information**12.1. Toxicity**

No data is available on the product itself.

| CAS No | Chemical name | | | | | |
|-----------|---|-------------------|-----------|------------------------------|--------|--------|
| | Aquatic toxicity | Dose | [h] [d] | Species | Source | Method |
| 7727-54-0 | diammonium peroxodisulphate; ammonium persulphate | | | | | |
| | Acute fish toxicity | LC50 76 mg/l | 96 h | Onchorhynchus mykiss | | |
| | Acute crustacea toxicity | EC50 120 mg/l | 48 h | Daphnia magna | | |
| 77-92-9 | Citric acid | | | | | |
| | Acute fish toxicity | LC50 440-760 mg/l | 96 h | Leuciscus idus (Golden orfe) | | |
| | Acute crustacea toxicity | EC50 160 mg/l | 48 h | Crustacea | | |

12.2. Persistence and degradability

No data is available on the product itself.

| CAS No | Chemical name | | | | |
|---------|---------------------------------|----------|---|--------|--|
| | Method | Value | d | Source | |
| | Evaluation | | | | |
| 77-92-9 | Citric acid | | | | |
| | OECD Test Guideline 302 | 98 % | 2 | IUCLID | |
| | Biochemical Oxygen Demand (BOD) | 526 mg/g | 5 | IUCLID | |

12.3. Bioaccumulative potential

No data is available on the product itself.

12.4. Mobility in soil

No data is available on the product itself.

12.5. Results of PBT and vPvB assessment

No data is available on the product itself.

12.6. Other adverse effects

No data is available on the product itself.

SECTION 13: Disposal considerations**13.1. Waste treatment methods****Disposal recommendations**

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

List of Wastes Code - residues/unused products

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

List of Wastes Code - used product

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

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SECTION 14: Transport information**Land transport (ADR/RID)**

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



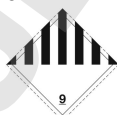
Classification code: M11
 Special Provisions: 251 340
 Limited quantity: SP251
 Excepted quantity: SP340
 Transport category: 2
 Hazard No: -
 Tunnel restriction code: E

Inland waterways transport (ADN)**Other applicable information (inland waterways transport)**

Not tested

Marine transport (IMDG)

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



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

Air transport (ICAO-TI/IATA-DGR)

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



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

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

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

14.6. Special precautions for user

Use personal protective equipment.

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

Not relevant

Other applicable information

These transport data apply to the entire pack

SECTION 15: Regulatory information

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

National regulatory information

| | |
|--------------------------------|---|
| Employment restrictions: | Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC). |
| Water contaminating class (D): | 1 - slightly water contaminating |

15.2. Chemical safety assessment

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

SECTION 16: Other information

Changes

Revision Date 12.06.2018

Safety datasheet sections which have been updated: 2, 3, 7, 8, 11, 15, 16

Revision Date 09.03.2017

Safety datasheet sections which have been updated: 7, 14

Revision: 23.07.2013

Classification for mixtures and used evaluation method according to Regulation (EC) No. 1272/2008 [CLP]

| Classification | Classification procedure |
|---------------------|--------------------------|
| Acute Tox. 4; H302 | Calculation method |
| Skin Irrit. 2; H315 | Calculation method |
| Eye Irrit. 2; H319 | Calculation method |
| Resp. Sens. 1; H334 | Calculation method |
| Skin Sens. 1; H317 | Calculation method |
| STOT SE 3; H335 | Calculation method |

Relevant H and EUH statements (number and full text)

| | |
|------|--|
| H272 | May intensify fire; oxidiser. |
| H302 | Harmful if swallowed. |
| H315 | Causes skin irritation. |
| H317 | May cause an allergic skin reaction. |
| H319 | Causes serious eye irritation. |
| H334 | May cause allergy or asthma symptoms or breathing difficulties if inhaled. |
| H335 | May cause respiratory irritation. |

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Further Information

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

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

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LCK 337 Nickel, LCK 337 A; 2/2

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

LCK 337 Nickel, LCK 337 A; 2/2

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

Water analysis

1.3. Details of the supplier of the safety data sheet

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

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

1.4. Emergency telephone number:

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

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

Hazard categories:

Substance or mixture corrosive to metals: Met. Corr. 1

Skin corrosion/irritation: Skin Corr. 1A

Serious eye damage/eye irritation: Eye Dam. 1

Hazard Statements:

May be corrosive to metals.

Causes severe skin burns and eye damage.

Causes serious eye damage.

2.2. Label elements**Regulation (EC) No. 1272/2008****Hazard components for labelling**

sodium hydroxide; caustic soda

Signal word: Danger**Pictograms:**

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Hazard statements

- H290 May be corrosive to metals.
 H314 Causes severe skin burns and eye damage.

Precautionary statements

- P280 Wear protective gloves/protective clothing/eye protection/face protection.
 P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
 P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P310 Immediately call a POISON CENTER/doctor.

Additional advice on labelling

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

2.3. Other hazards

no data available

SECTION 3: Composition/information on ingredients**3.2. Mixtures****Hazardous components**

| CAS No | Chemical name | | | Quantity |
|-----------|---------------------------------------|--------------|----------|----------|
| | EC No | Index No | REACH No | |
| | GHS Classification | | | |
| 7732-18-5 | Water | | | > 80% |
| | 231-791-2 | | | |
| 1310-73-2 | sodium hydroxide; caustic soda | | | < 20% |
| | 215-185-5 | 011-002-00-6 | | |
| | Skin Corr. 1A; H314 | | | |
| 95-45-4 | Dimethylglyoxime | | | < 1% |
| | 202-420-1 | | | |
| | Flam. Sol. 2, Acute Tox. 3; H228 H301 | | | |

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

SECTION 4: First aid measures**4.1. Description of first aid measures****General information**

Take off all contaminated clothing immediately.
 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. 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.

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

Causes severe burns. Cough, Shortness of breath, Spasm.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

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

Unsuitable extinguishing media

No Limit

5.2. Special hazards arising from the substance or mixture

Fire may liberate hazardous vapours.

5.3. Advice for firefighters

In the event of fire, wear self-contained breathing apparatus. 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.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Use personal protective equipment.

6.2. Environmental precautions

Do not flush into surface water or sanitary sewer system.

6.3. Methods and material for containment and cleaning up

Sweep up or vacuum up spillage and collect in suitable container for disposal.

After cleaning, flush away traces with water.

6.4. Reference to other sections

13. Disposal considerations

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Avoid contact with skin and eyes.

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

Advice on protection against fire and explosion

See also section 5

Further information on handling

Observe label precautions.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep containers dry and tightly closed to avoid moisture absorption and contamination.

Hints on joint storage

Do not store near acids.

7.3. Specific end use(s)

Reagent for analysis

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SECTION 8: Exposure controls/personal protection**8.1. Control parameters****Exposure limits (EH40)**

| CAS No | Substance | ppm | mg/m ³ | fibres/ml | Category | Origin |
|-----------|------------------|-----|-------------------|-----------|---------------|--------|
| 1310-73-2 | Sodium hydroxide | - | 2 | | STEL (15 min) | WEL |

Additional advice on limit values

None known.

8.2. Exposure controls**Appropriate engineering controls**

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

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

Protective and hygiene measures

Wash hands before breaks and at the end of workday.

Eye/face protection

Safety glasses with side-shields

Hand protection

Use barrier skin cream.

The protective gloves to be used must comply with the specifications of EC directive 2016/425/EC and the resultant standard EN374.

In case of full contact:

Glove material : Nitrile rubber

Layer thickness: 0,11 mm

Break through time: >480 min

In case of contact through splashing:

Glove material : Nitrile rubber

Layer thickness: 0,11 mm

Break through time: >480 min

Skin protection

Avoid contact with skin, eyes and clothing.

Respiratory protection

Provide adequate ventilation.

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

| | |
|----------------------|------------|
| Physical state: | liquid |
| Colour: | colourless |
| Odour: | odourless |
| pH-Value (at 20 °C): | 12,6 |

Changes in the physical state

| | |
|--|-------------------|
| Melting point: | - 17 °C |
| Initial boiling point and boiling range: | 145 °C |
| Sublimation point: | not applicable |
| Softening point: | not applicable |
| Pour point: | no data available |

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| | |
|-------------------------------------|-------------------------|
| : | no data available |
| Flash point: | not applicable |
| Flammability | |
| Solid: | not applicable |
| Gas: | not applicable |
| Explosive properties | |
| not applicable | |
| Lower explosion limits: | not applicable |
| Upper explosion limits: | not applicable |
| Ignition temperature: | no data available |
| Auto-ignition temperature | |
| Solid: | no data available |
| Gas: | no data available |
| Decomposition temperature: | no data available |
| Oxidizing properties | |
| no data available | |
| Vapour pressure: | no data available |
| Vapour pressure: | no data available |
| Density (at 20 °C): | 1,145 g/cm ³ |
| Bulk density: | not applicable |
| Water solubility: (at 20 °C) | completely soluble |
| Solubility in other solvents | |
| no data available | |
| Partition coefficient: | no data available |
| Viscosity / dynamic: | no data available |
| Viscosity / kinematic: | no data available |
| Flow time: | no data available |
| Vapour density: | no data available |
| Evaporation rate: | no data available |
| Solvent separation test: | no data available |
| Solvent content: | no data available |

9.2. Other information

| | |
|-------------------|-------------------|
| Solid content: | no data available |
| no data available | |

SECTION 10: Stability and reactivity**10.1. Reactivity**

No dangerous reaction known under conditions of normal use. May be corrosive to metals.

10.2. Chemical stability

Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

Exothermic reaction with strong acids.

10.4. Conditions to avoid

Extremes of temperature and direct sunlight.

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10.5. Incompatible materials

Acids, Oxidizing agents, Light metals

10.6. Hazardous decomposition products

Gives off hydrogen by reaction with metals.

SECTION 11: Toxicological information**11.1. Information on toxicological effects****Toxicokinetics, metabolism and distribution**

Angaben zur Toxikologie liegen nicht vor.

Acute toxicity

No data is available on the product itself.

| CAS No | Chemical name | | | | |
|---------|------------------|---------------|---------|--------|--------|
| | Exposure route | Dose | Species | Source | Method |
| 95-45-4 | Dimethylglyoxime | | | | |
| | oral | LD50 mg/kg | 200-500 | rat | |

Irritation and corrosivity

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

Sensitising effects

No known effect.

Carcinogenic/mutagenic/toxic effects for reproduction

Contains no ingredient listed as a carcinogen

STOT-single exposure

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

STOT-repeated exposure

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

Aspiration hazard

No aspiration toxicity classification

Specific effects in experiment on an animal

None known.

Additional information on tests

None known.

Practical experience**Observations relevant to classification**

None known.

Other observations

None known.

Further information

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

SECTION 12: Ecological information**12.1. Toxicity**

No data is available on the product itself.

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| CAS No | Chemical name | | | | | |
|-----------|--------------------------------|--------------|-----------|---------|-------------------------|--------|
| | Aquatic toxicity | Dose | [h] [d] | Species | Source | Method |
| 1310-73-2 | sodium hydroxide; caustic soda | | | | | |
| | Acute fish toxicity | LC50 mg/l | 45,4 | 96 h | Onchorhynchus mykiss | |

12.2. Persistence and degradability

No data is available on the product itself.

12.3. Bioaccumulative potential

No data is available on the product itself.

12.4. Mobility in soil

no data available

12.5. Results of PBT and vPvB assessment

no data available

12.6. Other adverse effects

No known effect.

SECTION 13: Disposal considerations**13.1. Waste treatment methods****Disposal recommendations**

Our local agencies will accept used cuvettes to ensure their proper disposal.

In accordance with local and national regulations.

List of Wastes Code - residues/unused products

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

List of Wastes Code - used product

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

SECTION 14: Transport information**Land transport (ADR/RID)****14.1. UN number:**

UN 3316

14.2. UN proper shipping name:

Chemical kit

14.3. Transport hazard class(es):

9

14.4. Packing group:

II

Hazard label:

9



Classification code:

M11

Special Provisions:

251 340

Limited quantity:

SP251

Excepted quantity:

SP340

Transport category:

2

Hazard No:

-

Tunnel restriction code:

E

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Inland waterways transport (ADN)**Other applicable information (inland waterways transport)**

Not tested

Marine transport (IMDG)

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



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

Air transport (ICAO-TI/IATA-DGR)

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



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

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

14.6. Special precautions for user

Use personal protective equipment.

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

Not relevant

Other applicable information

These transport data apply to the entire pack

SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****National regulatory information**

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Employment restrictions: Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC). Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

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

15.2. Chemical safety assessment

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

SECTION 16: Other information

Changes

Revision Date 19.09.2019

Safety datasheet sections which have been updated: 8

Revision Date 12.06.2018

Safety datasheet sections which have been updated: 2, 7, 15, 16

Revision Date 09.03.2017

Safety datasheet sections which have been updated: 7, 14

Revision: 23.07.2013

Classification for mixtures and used evaluation method according to Regulation (EC) No. 1272/2008 [CLP]

| Classification | Classification procedure |
|---------------------|--------------------------|
| Met. Corr. 1; H290 | On basis of test data |
| Skin Corr. 1A; H314 | Calculation method |
| Eye Dam. 1; H318 | Calculation method |

Relevant H and EUH statements (number and full text)

H228 Flammable solid.
 H290 May be corrosive to metals.
 H301 Toxic if swallowed.
 H314 Causes severe skin burns and eye damage.
 H318 Causes serious eye damage.

Further Information

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

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