

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

Revision date: 23.04.2018

**12066-99 ChromaVer 3**

Product code: 1206699

Page 1 of 7

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

12066-99 ChromaVer 3

**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:

Serious eye damage/eye irritation: Eye Dam. 1

Hazard Statements:

Causes serious eye damage.

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

Potassium disulfate

**Signal word:** Danger**Pictograms:****Hazard statements**

H318 Causes serious eye damage.

**Precautionary statements**

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**12066-99 ChromaVer 3**

Revision date: 23.04.2018

Product code: 1206699

Page 2 of 7

P310 present and easy to do. Continue rinsing.  
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**

None known.

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

| CAS No    | Chemical name   | Quantity |          |         |
|-----------|---|----------|----------|---------|
|           | EC No   | Index No | REACH No |         |
|           | Classification according to Regulation (EC) No. 1272/2008 [CLP] |          |          |         |
| 7790-62-7 | Potassium disulfate   |          |          | 75-85 % |
|           | 232-216-8   |          |          |         |
|           | Skin Corr. 1A, Eye Dam. 1; H314 H318                            |          |          |         |
| 7487-88-9 | Magnesium sulfate   |          |          | 15-25 % |
|           | 231-298-2   |          |          |         |
|           |   |          |          |         |
| 140-22-7  | 1,5 Diphenylcarbazine   |          |          | <1 %    |
|           | 205-403-7   |          |          |         |
|           | Skin Irrit. 2, Eye Irrit. 2, STOT SE 3; H315 H319 H335          |          |          |         |

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

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

Take off all contaminated clothing immediately.

**After inhalation**

Move to fresh air.

**After contact with skin**

Wash off immediately with plenty of water. 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. 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. Show this safety data sheet to the doctor in attendance.

Never give anything by mouth to an unconscious person.

**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**

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### 12066-99 ChromaVer 3

Revision date: 23.04.2018

Product code: 1206699

Page 3 of 7

#### **Suitable extinguishing media**

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

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

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

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

In the case of respirable dust and/or fumes, use self-contained breathing apparatus and dust impervious protective suit.

#### **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.

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

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

Store at room temperature in the original container.

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

Laboratory chemicals

### SECTION 8: Exposure controls/personal protection

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

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

None known.

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

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

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

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

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

Wash hands before breaks and after work.

##### **Eye/face protection**

Safety glasses with side-shields

##### **Hand protection**

Use barrier skin cream.

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### 12066-99 ChromaVer 3

Revision date: 23.04.2018

Product code: 1206699

Page 4 of 7

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

Breathing apparatus only if aerosol or dust is formed.

Recommended Filter type: ABEK-filter

## SECTION 9: Physical and chemical properties

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

|                      |                    |
|----------------------|--------------------|
| Physical state:      | powder             |
| Colour:              | red white          |
| Odour:               | none               |
| pH-Value (at 20 °C): | 1,1 (5 % solution) |

#### Changes in the physical state

|  |                   |
|--|-------------------|
| Melting point:                           | no data available |
| Initial boiling point and boiling range: | not applicable    |
| Sublimation point:                       | no data available |
| Softening point:                         | not applicable    |
| Pour point:                              | not applicable    |
| Flash point:                             | not applicable    |

#### Flammability

|        |                |
|--------|----------------|
| Solid: | not applicable |
| Gas:   | not applicable |

#### Explosive properties

no data available

|                         |                   |
|-------------------------|-------------------|
| 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: 215 °C

#### Oxidizing properties

no data available

|                                 |                        |
|---------------------------------|------------------------|
| Vapour pressure:                | no data available      |
| Density (at 20 °C):             | 2,26 g/cm <sup>3</sup> |
| Bulk density:                   | no data available      |
| Water solubility:<br>(at 20 °C) | slightly soluble       |

#### Solubility in other solvents

no data available

|                        |                   |
|------------------------|-------------------|
| Partition coefficient: | no data available |
| Viscosity / dynamic:   | not applicable    |
| Viscosity / kinematic: | not applicable    |

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### 12066-99 ChromaVer 3

Revision date: 23.04.2018

Product code: 1206699

Page 5 of 7

|                          |                   |
|--------------------------|-------------------|
| Flow time:               | not applicable    |
| Vapour density:          | no data available |
| Evaporation rate:        | no data available |
| Solvent separation test: | no data available |
| Solvent content:         | no data available |

#### 9.2. Other information

|                |                |
|----------------|----------------|
| Solid content: | not applicable |
|----------------|----------------|

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

No dangerous reaction known under conditions of normal use.

#### 10.2. Chemical stability

Stable under recommended storage conditions.

#### 10.3. Possibility of hazardous reactions

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

#### 10.4. Conditions to avoid

Product is sensitive to light and moisture. Decomposes on heating.

#### 10.5. Incompatible materials

Bases, Solvent

#### 10.6. Hazardous decomposition products

Above 215 °C, hazardous fumes may be released.

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

##### **Acute toxicity**

No data is available on the product itself.

##### **Irritation and corrosivity**

H318 - Causes serious eye damage.

Skin corrosion: Not applicable.

Test Method: Animal studies, rabbit skin

##### **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**

No data is available on the product itself.

##### **Additional information on tests**

None known.

##### **Further information**

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

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### 12066-99 ChromaVer 3

Revision date: 23.04.2018

Product code: 1206699

Page 6 of 7

practice.

## SECTION 12: Ecological information

### 12.1. Toxicity

No data is available on the product itself. Do not let product enter drains.

### 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

#### Advice on 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 hazardous substances, including mixtures of laboratory chemicals; 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 hazardous substances, including mixtures of laboratory chemicals; 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 hazardous substances, including mixtures of laboratory chemicals; hazardous waste

## SECTION 14: Transport information

### Land transport (ADR/RID)

#### Other applicable information (land transport)

Not subject to transport regulations.

### Inland waterways transport (ADN)

#### Other applicable information (inland waterways transport)

Not tested

### Marine transport (IMDG)

#### Other applicable information (marine transport)

Not subject to transport regulations.

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

#### Other applicable information (air transport)

Not subject to transport regulations.

### 14.5. Environmental hazards

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### 12066-99 ChromaVer 3

Revision date: 23.04.2018

Product code: 1206699

Page 7 of 7

ENVIRONMENTALLY HAZARDOUS: no

#### **14.6. Special precautions for user**

no data available

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

Not relevant

### SECTION 15: Regulatory information

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

##### **National regulatory information**

Water contaminating class (D): 2 - clearly 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: 23.04.2018

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

Revision: 22.04.2015

Safety datasheet sections which have been updated: 2, 11

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

| Classification   | Classification procedure |
|------------------|--------------------------|
| Eye Dam. 1; H318 | Calculation method       |

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

H314 Causes severe skin burns and eye damage.  
H315 Causes skin irritation.  
H318 Causes serious eye damage.  
H319 Causes serious eye irritation.  
H335 May cause respiratory irritation.

#### **Further Information**

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 Regulation (EC) No 1907/2006

**2043-99 Chromium 1 Reagent**

Revision date: 22.06.2017

Product code: 204399

Page 1 of 9

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

2043-99 Chromium 1 Reagent

**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 Corr. 1A

Serious eye damage/eye irritation: Eye Dam. 1

Hazard Statements:

Harmful if swallowed.

Harmful if inhaled.

Causes severe skin burns and eye damage.

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

Lithium hydroxide

Lithium Hypobromite

**Signal word:** Danger**Pictograms:**



## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### 2043-99 Chromium 1 Reagent

Revision date: 22.06.2017

Product code: 204399

Page 2 of 9

#### Hazard statements

- H302 Harmful if swallowed.  
 H332 Harmful if inhaled.  
 H314 Causes severe skin burns and eye damage.

#### Precautionary statements

- P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.  
 P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.  
 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 |
|            | Classification according to Regulation (EC) No. 1272/2008 [CLP]   |          |
| 1310-65-2  | Lithium hydroxide   | 40-50 %  |
|            | 215-183-4   |          |
|            | Acute Tox. 3, Acute Tox. 3, Skin Corr. 1A; H331 H301 H314         |          |
| 7757-82-6  | Sodium sulfate  | 30-40 %  |
|            | 231-820-9   |          |
| 13824-95-8 | Lithium Hypobromite   | 10-20 %  |
|            |   |          |
|            | Ox. Liq. 2, Skin Corr. 1B, Aquatic Acute 1; H272 H314 H400 EUH031 |          |

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

#### After inhalation

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

#### After contact with skin

Wash off immediately with plenty of water for at least 15 minutes.  
 Immediate medical treatment is necessary as untreated wounds from corrosion of the skin heal slowly and with difficulty. Show this safety data sheet to the doctor in attendance.

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### 2043-99 Chromium 1 Reagent

Revision date: 22.06.2017

Product code: 204399

Page 3 of 9

#### **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. Never give anything by mouth to an unconscious person.  
Consult a physician. Show this safety data sheet to the doctor in attendance.

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

May cause thermal burns.  
Nausea, Vomiting, Diarrhoea, Cough,

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

Treat symptomatically.

## SECTION 5: Firefighting measures

### **5.1. Extinguishing media**

#### **Suitable extinguishing media**

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

Water, Carbon dioxide (CO<sub>2</sub>), Dry powder

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

Fire may liberate hazardous vapours.  
The following may develop in event of fire: sulfur oxides., Hydrogen halides, Sodium oxides  
Gives off hydrogen by reaction with metals.

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

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.

## SECTION 6: Accidental release measures

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

Use personal protective equipment. Only qualified personnel equipped with suitable protective equipment may intervene. Immediately evacuate personnel to safe areas.  
Do not breathe vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

### **6.2. Environmental precautions**

Do not flush into surface water or sanitary sewer system.

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

Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local/national regulations (see section 13).

### **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.

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### 2043-99 Chromium 1 Reagent

Revision date: 22.06.2017

Product code: 204399

Page 4 of 9

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

#### Further information on handling

Observe label precautions.

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

##### Requirements for storage rooms and vessels

Keep at temperatures between 10 and 25 °C.

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

##### Hints on joint storage

Do not store together with Acids, Metals, Oxidizing agents

##### Further information on storage conditions

Accessible only for authorized persons.

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

Laboratory chemicals

## SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

##### Exposure limits (EH40)

| CAS No    | Substance         | ppm | mg/m <sup>3</sup> | fibres/ml | Category      | Origin |
|-----------|-------------------|-----|-------------------|-----------|---------------|--------|
| 1310-65-2 | Lithium hydroxide | -   | 1                 |           | STEL (15 min) | WEL    |

##### Additional advice on limit values

None known.

#### 8.2. Exposure controls

##### Appropriate engineering controls

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

##### Protective and hygiene measures

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

Wash hands before breaks and after work.

##### Eye/face protection

Safety glasses with side-shields

##### Hand protection

Use barrier skin cream.

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

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

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

Consult your supplier if the material is to be used for special applications such as in the food industry or for hygiene, medical or surgical end-use.

Gloves must be inspected prior to use. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

##### Skin protection

Avoid contact with skin, eyes and clothing.

Remove and wash contaminated clothing before re-use.

##### Respiratory protection

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

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**2043-99 Chromium 1 Reagent**

Revision date: 22.06.2017

Product code: 204399

Page 5 of 9

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

|                      |                           |
|----------------------|---------------------------|
| Physical state:      | powder                    |
| Colour:              | light yellow              |
| Odour:               | odourless                 |
| pH-Value (at 20 °C): | 11 aqueous solution 0,1 N |

**Changes in the physical state**

|  |                   |
|--|-------------------|
| Melting point:                           | > 400 °C          |
| Initial boiling point and boiling range: | no data available |
| Sublimation point:                       | no data available |
| Softening point:                         | no data available |
| Pour point:                              | no data available |
| :  | no data available |
| Flash point:                             | not applicable    |
| Sustaining combustion:                   | No data available |

**Flammability**

|        |                |
|--------|----------------|
| Solid: | not applicable |
| Gas:   | not applicable |

**Explosive properties**

no data available

|                         |                |
|-------------------------|----------------|
| Lower explosion limits: | not applicable |
| Upper explosion limits: | not applicable |
| Ignition temperature:   | not applicable |

**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):             | 1,48 g/cm <sup>3</sup> |
| Bulk density:                   | no data available      |
| Water solubility:<br>(at 20 °C) | partly 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 |

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### 2043-99 Chromium 1 Reagent

Revision date: 22.06.2017

Product code: 204399

Page 6 of 9

Solvent content: no data available

#### 9.2. Other information

Solid content: no data available

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

May be corrosive to metals.

#### 10.2. Chemical stability

Stable under recommended storage conditions.

#### 10.3. Possibility of hazardous reactions

Reacts with the following substances: Metals, Acids, Combustible material, Oxidizing agents

#### 10.4. Conditions to avoid

To avoid thermal decomposition, do not overheat.

Exposure to moisture.

#### 10.5. Incompatible materials

Organic materials, Metals

#### 10.6. Hazardous decomposition products

Hydrogen, by reaction with metals

#### Further information

Stable under recommended storage conditions.

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

##### Acute toxicity

No data is available on the product itself.

| CAS No    | Chemical name            |                 |         |        |        |
|-----------|--------------------------|-----------------|---------|--------|--------|
|           | Exposure route           | Dose            | Species | Source | Method |
| 1310-65-2 | Lithium hydroxide        |                 |         |        |        |
|           | oral                     | LD50 210 mg/kg  | Ratte   |        |        |
|           | inhalation vapour        | ATE 3 mg/l      |         |        |        |
|           | inhalation (4 h) aerosol | LC50 0,96 mg/l  | Ratte   |        |        |
| 7757-82-6 | Sodium sulfate           |                 |         |        |        |
|           | oral                     | LD50 5989 mg/kg | mouse   |        |        |

##### Irritation and corrosivity

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

##### 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

May cause long-term adverse effects in the aquatic environment.

Do not flush into surface water or sanitary sewer system.

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### 2043-99 Chromium 1 Reagent

Revision date: 22.06.2017

Product code: 204399

Page 7 of 9

| CAS No    | Chemical name            |      |           |         |                  |        |
|-----------|--------------------------|------|-----------|---------|------------------|--------|
|           | Aquatic toxicity         | Dose | [h]   [d] | Species | Source           | Method |
| 7757-82-6 | Sodium sulfate           |      |           |         |                  |        |
|           | Acute fish toxicity      | LC50 | 120 mg/l  | 96 h    | Gambusia affinis | Merck  |
|           | Acute crustacea toxicity | EC50 | 2564 mg/l | 48 h    |                  |        |

#### **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 data available

### SECTION 13: Disposal considerations

#### **13.1. Waste treatment methods**

##### **Advice on 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 hazardous substances, including mixtures of laboratory chemicals; 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 hazardous substances, including mixtures of laboratory chemicals; 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 hazardous substances, including mixtures of laboratory chemicals; hazardous waste

##### **Contaminated packaging**

Dispose of as unused product.

The hazard and precautionary statements displayed on the label also apply to any residues left in the container.

### SECTION 14: Transport information

#### **Land transport (ADR/RID)**

##### **14.1. UN number:**

UN 3262

##### **14.2. UN proper shipping name:**

CORROSIVE SOLID, BASIC, INORGANIC, N.O.S. (Lithium Hypobromite/Lithium hydroxide - mixture)

##### **14.3. Transport hazard class(es):**

8

##### **14.4. Packing group:**

II

Hazard label:

8

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### 2043-99 Chromium 1 Reagent

Revision date: 22.06.2017

Product code: 204399

Page 8 of 9



Classification code: C6  
Special Provisions: 274  
Limited quantity: 1 kg  
Transport category: 2  
Hazard No: 80  
Tunnel restriction code: E

#### Other applicable information (land transport)

Excepted Quantities: E2

#### Inland waterways transport (ADN)

##### Other applicable information (inland waterways transport)

Not tested

#### Marine transport (IMDG)

**14.1. UN number:** UN 3262  
**14.2. UN proper shipping name:** CORROSIVE SOLID, BASIC, INORGANIC, N.O.S.  
**14.3. Transport hazard class(es):** 8  
**14.4. Packing group:** II  
Hazard label: 8



Special Provisions: 274  
Limited quantity: 1 kg  
EmS: F-A, S-B

#### Other applicable information (marine transport)

Excepted Quantities: E2

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

**14.1. UN number:** UN 3262  
**14.2. UN proper shipping name:** CORROSIVE SOLID, BASIC, INORGANIC, N.O.S.  
**14.3. Transport hazard class(es):** 8  
**14.4. Packing group:** II  
Hazard label: 8



Special Provisions: A3 A803  
Limited quantity Passenger: 5 kg  
IATA-packing instructions - Passenger: 859  
IATA-max. quantity - Passenger: 15 kg  
IATA-packing instructions - Cargo: 863  
IATA-max. quantity - Cargo: 50 kg

#### Other applicable information (air transport)

Excepted Quantities: E2

Passenger-LQ: Y844

#### 14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### 2043-99 Chromium 1 Reagent

Revision date: 22.06.2017

Product code: 204399

Page 9 of 9

#### 14.6. Special precautions for user

no data available

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

Not relevant

#### **Other applicable information**

Additional Information: This product may be shipped as part of a chemical kit composed of various compatible dangerous goods for analytical or testing purposes. This kit would have the following classification: Proper Shipping Name: Chemical Kit, Hazard Class: 9, UN Number 3316, Package group II, EMS Code: F-A, S-P

### 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). 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: 22.06.2017  
Safety datasheet sections which have been updated: 2  
Revision: 18.07.2016  
Safety datasheet sections which have been updated: 2.2, 10  
Revision: 20.04.2015  
Safety datasheet sections which have been updated: 2, 11  
Revision: 07.07.2014  
Safety datasheet sections which have been updated: 4-16

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

|        |  |
|--------|--|
| H272   | May intensify fire; oxidiser.            |
| H301   | Toxic if swallowed.                      |
| H302   | Harmful if swallowed.                    |
| H314   | Causes severe skin burns and eye damage. |
| H331   | Toxic if inhaled.                        |
| H332   | Harmful if inhaled.                      |
| H400   | Very toxic to aquatic life.              |
| EUH031 | Contact with acids liberates toxic gas.  |

#### **Further Information**

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 Regulation (EC) No 1907/2006

**2044-99 Chromium 2 Reagent**

Revision date: 20.04.2015

Product code: 204499

Page 1 of 8

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

2044-99 Chromium 2 Reagent

**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. 1B

Hazard Statements:

May be corrosive to metals.

Causes severe skin burns and eye damage.

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

5-Sulfosalicylic Acid, anhydrous

CDTA Trisodium Salt

**Signal word:** Danger**Pictograms:****Hazard statements**

H290

May be corrosive to metals.

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### 2044-99 Chromium 2 Reagent

Revision date: 20.04.2015

Product code: 204499

Page 2 of 8

H314 Causes severe skin burns and eye damage.

#### Precautionary statements

P234 Keep only in original packaging.  
 P260 Do not breathe dust/fume/gas/mist/vapours/spray.  
 P280 Wear protective gloves/protective clothing/eye protection/face protection.  
 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.  
 P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.  
 P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
 P310 Immediately call a POISON CENTER/doctor.  
 P390 Absorb spillage to prevent material damage.

#### Additional advice on labelling

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

#### 2.3. Other hazards

None known.

### SECTION 3: Composition/information on ingredients

#### 3.2. Mixtures

##### Hazardous components

| CAS No     | Chemical name   |          |          | Quantity |
|------------|---|----------|----------|----------|
|            | EC No   | Index No | REACH No |          |
|            | Classification according to Regulation (EC) No. 1272/2008 [CLP] |          |          |          |
| 5965-83-3  | 5-Sulfosalicylic acid dihydrate                                 |          |          | 65-75 %  |
|            | 202-555-6   |          |          |          |
| 36679-96-6 | CDTA Trisodium Salt   |          |          | 15-25 %  |
|            | Skin Irrit. 2, Eye Irrit. 2; H315 H319                          |          |          |          |
| 7757-82-6  | Sodium sulfate  |          |          | 15-25 %  |
|            | 231-820-9   |          |          |          |

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

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

##### General information

Take off all contaminated clothing immediately.

##### After inhalation

Move to fresh air.

##### After contact with skin

Wash off immediately with plenty of water. 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.

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### 2044-99 Chromium 2 Reagent

Revision date: 20.04.2015

Product code: 204499

Page 3 of 8

#### After ingestion

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

#### 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

None known.

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

Fire may liberate hazardous vapours.

The following may develop in event of fire: sulfur oxides., Sodium oxides, nitrogen oxides (NOx), Carbon oxides

#### 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

Use mechanical handling equipment.

#### 6.4. Reference to other sections

13. Disposal considerations

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

##### Advice on safe handling

Avoid contact with skin, eyes and clothing.  
Do not breathe vapours/dust.

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

##### Requirements for storage rooms and vessels

Keep container tightly closed in a dry and well-ventilated place.  
Store in a cool and shaded area.

##### Hints on joint storage

Do not store together with Oxidizing agents

##### Further information on storage conditions

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

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### 2044-99 Chromium 2 Reagent

Revision date: 20.04.2015

Product code: 204499

Page 4 of 8

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

Laboratory chemicals

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

##### Additional advice on limit values

None known.

#### 8.2. Exposure controls

##### Appropriate engineering controls

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

##### Protective and hygiene measures

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

Wash hands before breaks and after work.

##### Eye/face protection

Safety glasses with side-shields

##### Hand protection

Use barrier skin cream.

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.

##### Skin protection

Avoid contact with skin, eyes and clothing.

##### Respiratory protection

Breathing apparatus only if aerosol or dust is formed.

Recommended Filter type: ABEK-filter

### SECTION 9: Physical and chemical properties

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

|                      |                    |
|----------------------|--------------------|
| Physical state:      | solid              |
| Colour:              | white              |
| Odour:               | odourless          |
| pH-Value (at 20 °C): | 1,2 (5 % solution) |

##### Changes in the physical state

|  |                |
|--|----------------|
| Melting point:                           | 155 - 170 °C   |
| Initial boiling point and boiling range: | not applicable |
| Sublimation point:                       | not applicable |
| Softening point:                         | not applicable |
| Pour point:                              | not applicable |
| Flash point:                             | not applicable |

##### Flammability

|        |                   |
|--------|-------------------|
| Solid: | no data available |
| Gas:   | no data available |

##### Explosive properties

no data available

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**2044-99 Chromium 2 Reagent**

Revision date: 20.04.2015

Product code: 204499

Page 5 of 8

|                                     |                        |
|-------------------------------------|------------------------|
| Lower explosion limits:             | not applicable         |
| Upper explosion limits:             | not applicable         |
| Ignition temperature:               | no data available      |
| <b>Auto-ignition temperature</b>    |                        |
| Solid:                              | no data available      |
| Gas:                                | no data available      |
| Decomposition temperature:          | no data available      |
| <b>Oxidizing properties</b>         |                        |
| no data available                   |                        |
| Vapour pressure:                    | not applicable         |
| Density (at 20 °C):                 | 1,61 g/cm <sup>3</sup> |
| Bulk density:                       | no data available      |
| Water solubility:<br>(at 20 °C)     | partly soluble         |
| <b>Solubility in other solvents</b> |                        |
| no data available                   |                        |
| Partition coefficient:              | not applicable         |
| Viscosity / dynamic:                | not applicable         |
| Viscosity / kinematic:              | not applicable         |
| Flow time:                          | not applicable         |
| Vapour density:                     | not applicable         |
| Evaporation rate:                   | not applicable         |
| Solvent separation test:            | not applicable         |
| Solvent content:                    | not applicable         |

**9.2. Other information**

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

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

Reactivity Hazard: Oxidizing agents

**10.2. Chemical stability**

Stable under recommended storage conditions.

**10.3. Possibility of hazardous reactions**

Hazardous polymerisation does not occur.

**10.4. Conditions to avoid**To avoid thermal decomposition, do not overheat.  
Product is sensitive to light and moisture.**10.5. Incompatible materials**

Oxidizing agents

**10.6. Hazardous decomposition products**Sulphur oxides, nitrogen oxides (NO<sub>x</sub>), Carbon oxides**Further information**

No dangerous reaction known under conditions of normal use.

**SECTION 11: Toxicological information**

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### 2044-99 Chromium 2 Reagent

Revision date: 20.04.2015

Product code: 204499

Page 6 of 8

#### 11.1. Information on toxicological effects

##### Acute toxicity

No data is available on the product itself.

| CAS No    | Chemical name                   |               |      |         |             |        |
|-----------|---------------------------------|---------------|------|---------|-------------|--------|
|           | Exposure route                  | Dose          |      | Species | Source      | Method |
| 5965-83-3 | 5-Sulfosalicylic acid dihydrate |               |      |         |             |        |
|           | oral                            | LD50<br>mg/kg | 1850 | Ratte   | NTI Service |        |
| 7757-82-6 | Sodium sulfate                  |               |      |         |             |        |
|           | oral                            | LD50<br>mg/kg | 5989 | mouse   |             |        |

##### Irritation and corrosivity

Causes skin and eye burns.

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

Contains no ingredient listed as a carcinogen

##### Aspiration hazard

No aspiration toxicity classification

##### Specific effects in experiment on an animal

No toxicology information is available.

##### Further information

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

## SECTION 12: Ecological information

#### 12.1. Toxicity

No data is available on the product itself.

| CAS No    | Chemical name            |              |           |         |                  |        |
|-----------|--------------------------|--------------|-----------|---------|------------------|--------|
|           | Aquatic toxicity         | Dose         | [h]   [d] | Species | Source           | Method |
| 7757-82-6 | Sodium sulfate           |              |           |         |                  |        |
|           | Acute fish toxicity      | LC50         | 120 mg/l  | 96 h    | Gambusia affinis | Merck  |
|           | Acute crustacea toxicity | EC50<br>mg/l | 2564      | 48 h    |                  |        |

#### 12.2. Persistence and degradability

No data is available on the product itself.

#### 12.3. Bioaccumulative potential

No data is available on the product itself.

#### 12.4. Mobility in soil

no data available

#### 12.5. Results of PBT and vPvB assessment

no data available

#### 12.6. Other adverse effects

No known effect.

##### Further information

Do not flush into surface water or sanitary sewer system.

## SECTION 13: Disposal considerations

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**2044-99 Chromium 2 Reagent**

Revision date: 20.04.2015

Product code: 204499

Page 7 of 8

**13.1. Waste treatment methods****Advice on 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 hazardous substances, including mixtures of laboratory chemicals; 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 hazardous substances, including mixtures of laboratory chemicals; 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 hazardous substances, including mixtures of laboratory chemicals; hazardous waste

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

|  |   |
|--|---|
| <b>14.1. UN number:</b>                  | UN 3261   |
| <b>14.2. UN proper shipping name:</b>    | Corrosive solid, acidic, organic, n.o.s. (5-Sulfosalicylic Acid, anhydrous-mixture) |
| <b>14.3. Transport hazard class(es):</b> | 8   |
| <b>14.4. Packing group:</b>              | III   |

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

Not tested

**Marine transport (IMDG)**

|  |  |
|--|--|
| <b>14.1. UN number:</b>                  | UN 3261  |
| <b>14.2. UN proper shipping name:</b>    | Corrosive solid, acidic, organic, n.o.s. (Sulfosalicylic acid mixture) |
| <b>14.3. Transport hazard class(es):</b> | 8  |
| <b>14.4. Packing group:</b>              | III  |
| Marine pollutant:                        | --   |
| EmS:                                     | F-A,S-B  |

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

|  |  |
|--|--|
| <b>14.1. UN number:</b>                  | UN 3261  |
| <b>14.2. UN proper shipping name:</b>    | Corrosive solid, acidic, organic, n.o.s. (Sulfosalicylic acid mixture) |
| <b>14.3. Transport hazard class(es):</b> | 8  |
| <b>14.4. Packing group:</b>              | III  |

**14.5. Environmental hazards**

ENVIRONMENTALLY HAZARDOUS: no

**14.6. Special precautions for user**

no data available

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

Not relevant

**Other applicable information**

Additional Information: This product may be shipped as part of a chemical kit composed of various compatible dangerous goods for analytical or testing purposes. This kit would have the following classification: Proper

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### 2044-99 Chromium 2 Reagent

Revision date: 20.04.2015

Product code: 204499

Page 8 of 8

Shipping Name: Chemical Kit, Hazard Class: 9, UN Number 3316, Package group II, EMS Code: F-A, S-P

#### 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). Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

Water contaminating class (D): 2 - clearly 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: 20.04.2015

Safety datasheet sections which have been updated: 2, 11

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

|      |  |
|------|--|
| H290 | May be corrosive to metals.              |
| H314 | Causes severe skin burns and eye damage. |
| H315 | Causes skin irritation.                  |
| H319 | Causes serious eye irritation.           |

##### Further Information

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 Regulation (EC) No 1907/2006

**2126-99 Acid Reagent Powder Pillows**

Revision date: 25.04.2016

Product code: 212699

Page 1 of 7

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

2126-99 Acid Reagent Powder Pillows

CAS No: 7790-62-7  
Index No: 019-001-00-2  
EC No: 232-216-8

**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:

Skin corrosion/irritation: Skin Corr. 1A

Serious eye damage/eye irritation: Eye Dam. 1

Hazard Statements:

Causes severe skin burns and eye damage.

Causes serious eye damage.

**2.2. Label elements****Regulation (EC) No. 1272/2008****Signal word:** Warning**Pictograms:****Hazard statements**

H319

Causes serious eye irritation.

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**2126-99 Acid Reagent Powder Pillows**

Revision date: 25.04.2016

Product code: 212699

Page 2 of 7

**Precautionary statements**

- P264 Wash thoroughly after handling.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P337+P313 If eye irritation persists: Get medical advice/attention.

**Additional advice on labelling**

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

**2.3. Other hazards**

no data available

**SECTION 3: Composition/information on ingredients****3.1. Substances****Hazardous components**

| CAS No    | Chemical name   | Quantity |          |       |
|-----------|---|----------|----------|-------|
|           | EC No   | Index No | REACH No |       |
|           | Classification according to Regulation (EC) No. 1272/2008 [CLP] |          |          |       |
| 7790-62-7 | Potassium disulfate   |          |          | 100 % |
|           | 232-216-8   |          |          |       |
|           | Skin Corr. 1A, Eye Dam. 1; H314 H318                            |          |          |       |

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. 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.

**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. Call a physician immediately. Show this safety data sheet to the doctor in attendance.

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

No known effect.

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

Treat symptomatically.

**SECTION 5: Firefighting measures****5.1. Extinguishing media****Suitable extinguishing media**

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

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### 2126-99 Acid Reagent Powder Pillows

Revision date: 25.04.2016

Product code: 212699

Page 3 of 7

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

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

#### **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**

Soak up with inert absorbent material.

#### **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.  
Do not breathe vapours/dust.

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

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

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

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

Do not store together with Solvent

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

Laboratory chemicals

### SECTION 8: Exposure controls/personal protection

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

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

##### **Appropriate engineering 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.

##### **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

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### 2126-99 Acid Reagent Powder Pillows

Revision date: 25.04.2016

Product code: 212699

Page 4 of 7

**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:      | solid              |
| Colour:              | white              |
| Odour:               | odourless          |
| pH-Value (at 20 °C): | 1,0 (5 % solution) |

**Changes in the physical state**

|  |                   |
|--|-------------------|
| Melting point:                           | 325 °C            |
| Initial boiling point and boiling range: | no data available |
| Flash point:                             | not applicable    |

**Flammability**

|        |                |
|--------|----------------|
| Solid: | not applicable |
| Gas:   | not applicable |

**Explosive properties**

no data available

|                         |                |
|-------------------------|----------------|
| Lower explosion limits: | not applicable |
| Upper explosion limits: | not applicable |

**Auto-ignition temperature**

|        |                   |
|--------|-------------------|
| Solid: | not applicable    |
| Gas:   | no data available |

Decomposition temperature: no data available

**Oxidizing properties**

The product has been shown not to be oxidising in a test following Directive 67/548/EEC ( Method A17, oxidising properties).

|                                 |                        |
|---------------------------------|------------------------|
| Vapour pressure:                | no data available      |
| Density (at 20 °C):             | 2,25 g/cm <sup>3</sup> |
| Water solubility:<br>(at 20 °C) | soluble                |

**Solubility in other solvents**

no data available

|                        |                   |
|------------------------|-------------------|
| Partition coefficient: | no data available |
| Vapour density:        | no data available |
| Evaporation rate:      | no data available |

### 9.2. Other information

no data available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Strong bases

### 10.2. Chemical stability

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### 2126-99 Acid Reagent Powder Pillows

Revision date: 25.04.2016

Product code: 212699

Page 5 of 7

Stable under recommended storage conditions.

#### **10.3. Possibility of hazardous reactions**

Sulphur oxides

#### **10.4. Conditions to avoid**

Extremes of temperature and direct sunlight.

Exposure to moisture.

#### **10.5. Incompatible materials**

Solvent, Strong bases

#### **10.6. Hazardous decomposition products**

Sulphur oxides

#### **Further information**

Stable under recommended storage conditions.

### SECTION 11: Toxicological information

#### **11.1. Information on toxicological effects**

##### **Acute toxicity**

LD50/oral/rat = 2340 mg/kg

### SECTION 12: Ecological information

#### **12.1. Toxicity**

No data is available on the product itself.

#### **12.2. Persistence and degradability**

No data is available on the product itself.

#### **12.3. Bioaccumulative potential**

Bioaccumulation is unlikely.

#### **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**

##### **Advice on 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 hazardous substances, including mixtures of laboratory chemicals; 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 hazardous substances, including mixtures of laboratory chemicals; 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 hazardous substances, including mixtures of laboratory chemicals; hazardous waste

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**2126-99 Acid Reagent Powder Pillows**

Revision date: 25.04.2016

Product code: 212699

Page 6 of 7

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

Not subject to transport regulations.

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

Not tested

**Marine transport (IMDG)****Other applicable information (marine transport)**

Not subject to transport regulations.

**Air transport (ICAO-TI/IATA-DGR)****Other applicable information (air transport)**

Not subject to transport regulations.

**14.5. Environmental hazards**

ENVIRONMENTALLY HAZARDOUS: no

Danger releasing substance: no data available

**14.6. Special precautions for user**

no data available

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

Not relevant

**Other applicable information**

Additional Information: This product may be shipped as part of a chemical kit composed of various compatible dangerous goods for analytical or testing purposes. This kit would have the following classification: Proper Shipping Name: Chemical Kit, Hazard Class: 9, UN Number 3316, Package group II, EMS Code: F-A, S-P

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

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

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

**National regulatory information**

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: 25.04.2016

Safety datasheet sections which have been updated: 2, 4, 6, 7, 9, 10, 12, 14, 15

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

H314 Causes severe skin burns and eye damage.

H318 Causes serious eye damage.

H319 Causes serious eye irritation.



## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### 2126-99 Acid Reagent Powder Pillows

Revision date: 25.04.2016

Product code: 212699

Page 7 of 7

#### Further Information

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.