

according to Regulation (EC) No 1907/2006

# Multielement-Standardlösung 20 Elemente je 10 mg/l mit 50 ml Salzsäure 37%/l

Revision date: 06.03.2024 Product code: 33688 Page 1 of 14

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

Multielement-Standardlösung 20 Elemente je 10 mg/l mit 50 ml Salzsäure 37%/l

UFI: Q990-W32D-H00N-1GDM

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

#### Use of the substance/mixture

Laboratory chemicals

Industrial uses: Uses of substances as such or in preparations at industrial sites

Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

### Uses advised against

Do not use for private purposes (household).

### 1.3. Details of the supplier of the safety data sheet

Company name: AnalytiChem GmbH

ACD

Street: Stempelstraße 6
Place: D-47167 Duisburg

Telephone: 0203/5194-0 Telefax: 0203/5194-290

E-mail: info@analytichem.de

Contact person: Abteilung Produktsicherheit Telephone: 0203/5194-107/117

E-mail: produktsicherheit@analytichem.de

Internet: www.analytichem.de
Responsible Department: Abteilung Produktsicherheit

1.4. Emergency telephone For Hazardous Materials [or Dangerous Goods] Incidents Spill, Leak, Fire,

number: Exposure, or Accident Call CHEMTREC Day or Night Within USA and Canada:

1-800-424-9300 Outside USA and Canada: +1 703-741-5970 (collect calls

accepted)

### **Further Information**

This product is a mixture. REACH Registration Number see section 3.

#### **SECTION 2: Hazards identification**

## 2.1. Classification of the substance or mixture

## Regulation (EC) No 1272/2008

Met. Corr. 1; H290

Full text of hazard statements: see SECTION 16.

### 2.2. Label elements

### Regulation (EC) No 1272/2008

Signal word: Warning

Pictograms:



# **Hazard statements**

H290 May be corrosive to metals.

#### **Precautionary statements**

P234 Keep only in original packaging.

P390 Absorb spillage to prevent material damage.



according to Regulation (EC) No 1907/2006

# Multielement-Standardlösung 20 Elemente je 10 mg/l mit 50 ml Salzsäure 37%/l

Revision date: 06.03.2024 Product code: 33688 Page 2 of 14

P406 Store in a corrosion-resistant container with a resistant inner liner.

# Special labelling of certain mixtures

EUH208 Contains nickel dichloride. May produce an allergic reaction.

### 2.3. Other hazards

No data available

### **SECTION 3: Composition/information on ingredients**

#### 3.2. Mixtures

## **Chemical characterization**

Mixtures in aqueous solution

## Relevant ingredients

| CAS No    | Chemical name  |                      |                  |           |  |
|-----------|--|----------------------|------------------|-----------|--|
|           | EC No  | Index No             | REACH No         |           |  |
|           | Classification (Regulatio  | n (EC) No 1272/2008) |                  |           |  |
| 7647-01-0 | Hydrochloric acid  |                      |                  | 1 - < 5 % |  |
|           | 231-595-7  | 017-002-01-X         | 01-2119484862-27 |           |  |
|           | Skin Corr. 1B, STOT SE   | 3; H314 H335         |                  |           |  |
| 7697-37-2 | nitric acid  |                      |                  | < 0.1 %   |  |
|           | 231-714-2  | 007-030-00-3         | 01-2119487297-23 |           |  |
|           | Ox. Liq. 3, Met. Corr. 1, Acute Tox. 3, Skin Corr. 1A; H272 H290 H331 H314 EUH071  |                      |                  |           |  |
| 7664-38-2 | phosphoric acid  |                      |                  |           |  |
|           | 231-633-2  | 015-011-00-6         | 01-2119485924-24 |           |  |
|           | Met. Corr. 1, Acute Tox. 4, Skin Corr. 1B, Eye Dam. 1; H290 H302 H314 H318   |                      |                  |           |  |
| 7718-54-9 | nickel dichloride  |                      |                  | < 0.01 %  |  |
|           | 231-743-0  | 028-011-00-6         |                  |           |  |
|           | Carc. 1A, Muta. 2, Repr. 1B, Acute Tox. 3, Acute Tox. 3, Skin Irrit. 2, Resp. Sens. 1, Skin Sens. 1, STOT RE 1, Aquatic Acute 1, Aquatic Chronic 1; H350i H341 H360D H331 H301 H315 H334 H317 H372 H400 H410 |                      |                  |           |  |

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

# Specific Conc. Limits, M-factors and ATE

| CAS No    | EC No  | Chemical name   | Quantity |  |  |  |  |
|-----------|--|---|----------|--|--|--|--|
|           | Specific Conc. L   | imits, M-factors and ATE  |          |  |  |  |  |
| 7647-01-0 | 231-595-7  | Hydrochloric acid   |          |  |  |  |  |
|           | Skin Corr. 1B; H<br>25 STOT SE 3   |   |          |  |  |  |  |
| 7697-37-2 | 231-714-2  | nitric acid   | < 0.1 %  |  |  |  |  |
|           | inhalation: ATE 2,65 mg/l (vapours) Ox. Liq. 3; H272: >= 65 - 100 Skin Corr. 1A; H314: >= 20 - 100 Skin Corr. 1B; H314: >= 5 - < 20  |   |          |  |  |  |  |
| 7664-38-2 | 231-633-2  | phosphoric acid   | < 0.01 % |  |  |  |  |
|           | oral: ATE = 500<br>Irrit. 2; H319: >=  | ) mg/kg Skin Corr. 1B; H314: >= 25 - 100 Skin Irrit. 2; H315: >= 10 - < 25 Eye<br>= 10 - < 25 |          |  |  |  |  |
| 7718-54-9 | 231-743-0  | nickel dichloride   | < 0.01 % |  |  |  |  |
|           | inhalation: ATE = 3 mg/l (vapours); inhalation: ATE = 0,5 mg/l (dusts or mists); oral: LD50 = 500 mg/kg Skin Irrit. 2; H315: >= 20 - 100 Skin Sens. 1; H317: >= 0,01 - 100 STOT RE 1; H372: >= 1 - 100 STOT RE 2; H373: >= 0,1 - < 1 Aquatic Acute 1; H400: M=1 Aquatic Chronic 1; H410: M=1 |   |          |  |  |  |  |

### **Further Information**

This product does not contain substances of very high concern according to Regulation (EC) No 1907/2006



according to Regulation (EC) No 1907/2006

## Multielement-Standardlösung 20 Elemente je 10 mg/l mit 50 ml Salzsäure 37%/l

Revision date: 06.03.2024 Product code: 33688 Page 3 of 14

(REACH), Article 57 above the respective regulatory concentration limit of = 0.1 % (w/w).

### **SECTION 4: First aid measures**

## 4.1. Description of first aid measures

#### General information

No data available

#### After inhalation

Provide fresh air.

Call a doctor if you feel unwell.

### After contact with skin

Wash immediately with: Water

Take off immediately all contaminated clothing and wash it before reuse.

In case of skin irritation, consult a physician.

### After contact with eyes

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.

Remove contact lenses, if present and easy to do. Continue rinsing.

#### After ingestion

Rinse mouth immediately and drink plenty of water.

Call a physician immediately.

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

Irritant

Allergic reactions

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

No data available

### **SECTION 5: Firefighting measures**

## 5.1. Extinguishing media

### Suitable extinguishing media

Co-ordinate fire-fighting measures to the fire surroundings.

# Unsuitable extinguishing media

no restriction

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

Non-combustible liquids

Hazardous combustion products

In case of fire may be liberated:

Hydrochloric gas

Metal oxide smoke, toxic

# 5.3. Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing. Full protection suit.

#### **Additional information**

Use water spray jet to protect personnel and to cool endangered containers.

#### **SECTION 6: Accidental release measures**

# 6.1. Personal precautions, protective equipment and emergency procedures

### **General advice**

Corrosive to metals.

## For non-emergency personnel

Provide adequate ventilation.

Print date: 06.03.2024



## **Safety Data Sheet**

according to Regulation (EC) No 1907/2006

## Multielement-Standardlösung 20 Elemente je 10 mg/l mit 50 ml Salzsäure 37%/l

Revision date: 06.03.2024 Product code: 33688 Page 4 of 14

Use personal protection equipment.

Avoid contact with skin, eyes and clothes.

Remove persons to safety.

**Emergency procedures** 

Do not breathe dust/fume/gas/mist/vapours/spray.

### For emergency responders

Precautionary statements For emergency responders: Personal protection equipment: see section 8

#### 6.2. Environmental precautions

Do not allow to enter into surface water or drains.

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

#### For containment

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Collect in closed and suitable containers for disposal.

#### For cleaning up

Clean contaminated articles and floor according to the environmental legislation.

### Other information

Provide adequate ventilation.

Do not breathe dust/fume/gas/mist/vapours/spray.

Wear breathing apparatus if exposed to vapours/dusts/aerosols.

### 6.4. Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

## **SECTION 7: Handling and storage**

## 7.1. Precautions for safe handling

## Advice on safe handling

If handled uncovered, arrangements with local exhaust ventilation have to be used.

Read label before use. Handle and open container with care.

When using do not eat, drink, smoke, sniff. Keep container tightly closed.

Use personal protection equipment.

Do not breathe vapour/aerosol.

# Advice on protection against fire and explosion

Usual measures for fire prevention.

#### Advice on general occupational hygiene

Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme.

Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat or drink.

### Further information on handling

Draw up and observe skin protection programme.

Wash hands and face before breaks and after work and take a shower if necessary.

Take off immediately all contaminated clothing and wash it before reuse.

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

### Requirements for storage rooms and vessels

Keep container tightly closed.

## Further information on storage conditions

Unsuitable container/equipment material: Metal storage temperature: +15°C - +25°C

### 7.3. Specific end use(s)

Laboratory chemicals



according to Regulation (EC) No 1907/2006

# Multielement-Standardlösung 20 Elemente je 10 mg/l mit 50 ml Salzsäure 37%/l

Revision date: 06.03.2024 Product code: 33688 Page 5 of 14

# **SECTION 8: Exposure controls/personal protection**

## 8.1. Control parameters

## **Occupational exposure limits**

| CAS No    | Substance  | ppm | mg/m³ | fib/cm³ | Category      | Origin |
|-----------|--|-----|-------|---------|---------------|--------|
| 7429-90-5 | Aluminium metal (Respirable Fraction)                  | -   | 1     |         | TWA (8 h)     |        |
| 7647-01-0 | Hydrogen chloride                                      | 5   | 8     | 1       | TWA (8 h)     |        |
|           |  | 10  | 15    | 1       | STEL (15 min) |        |
| -         | Nickel, inorganic compounds (as Ni), soluble compounds | -   | 0.1   |         | TWA (8 h)     |        |
| 7697-37-2 | Nitric acid  | 1   | 2.6   |         | STEL (15 min) |        |
| 7664-38-2 | Orthophosphoric acid                                   | -   | 1     | 1       | TWA (8 h)     |        |
|           |  | -   | 2     |         | STEL (15 min) |        |

## **Biological limit values**

| CAS No | Substance        | Parameter | Value  | Test material | Sampling time                            |
|--------|------------------|-----------|--------|---------------|--|
| -      | Nickel compounds | Ni        | 3 μg/L |               | After several consecutive working shifts |

## **DNEL/DMEL values**

| CAS No                   | Substance            |                |          |                       |
|--------------------------|----------------------|----------------|----------|-----------------------|
| DNEL type                |                      | Exposure route | Effect   | Value                 |
| 7647-01-0                | Hydrochloric acid    |                |          |                       |
| Worker DNEL,             | long-term            | inhalation     | local    | 8 mg/m³               |
| Worker DNEL,             | acute                | inhalation     | local    | 15 mg/m³              |
| Consumer DNI             | EL, long-term        | inhalation     | local    | 8 mg/m³               |
| Consumer DNI             | EL, acute            | inhalation     | local    | 15 mg/m³              |
| 7664-38-2                | phosphoric acid      |                |          |                       |
| Worker DNEL,             | acute                | inhalation     | local    | 2 mg/m³               |
| Worker DNEL,             | long-term            | inhalation     | local    | 2,92 mg/m³            |
| Consumer DNI             | EL, long-term        | inhalation     | systemic | 4,57 mg/m³            |
| Consumer DNI             | EL, long-term        | inhalation     | local    | 0,36 mg/m³            |
| Consumer DNI             | EL, long-term        | oral           | systemic | 0,1 mg/kg bw/day      |
| Worker DNEL,             | long-term            | inhalation     | systemic | 10,7 mg/m³            |
| 7718-54-9                | nickel dichloride    |                |          |                       |
| Worker DNEL,             | acute                | inhalation     | local    | 1,6 mg/m³             |
| Consumer DNI             | EL, acute            | inhalation     | systemic | 8,8 mg/m³             |
| Consumer DNI             | Consumer DNEL, acute |                | local    | 0,1 mg/m³             |
| Worker DNEL, acute       |                      | inhalation     | systemic | 104 mg/m³             |
| Consumer DNEL, long-term |                      | oral           | systemic | 0,02 mg/kg<br>bw/day  |
| Consumer DNI             | EL, acute            | oral           | systemic | 0,012 mg/kg<br>bw/day |



according to Regulation (EC) No 1907/2006

## Multielement-Standardlösung 20 Elemente je 10 mg/l mit 50 ml Salzsäure 37%/l

Revision date: 06.03.2024 Product code: 33688 Page 6 of 14

#### **PNEC values**

| CAS No   | Substance                 |             |
|--|---------------------------|-------------|
| Environmental                                    | Environmental compartment |             |
| 7718-54-9  | nickel dichloride         |             |
| Freshwater                                       |                           | 0,0071 mg/l |
| Freshwater (intermittent releases)               |                           | 0 mg/l      |
| Marine water                                     |                           | 0,0086 mg/l |
| Freshwater sediment                              |                           | 109 mg/kg   |
| Marine sediment                                  |                           | 109 mg/kg   |
| Secondary poisoning                              |                           | 0,12 mg/kg  |
| Micro-organisms in sewage treatment plants (STP) |                           | 0,33 mg/l   |
| Soil   |                           | 29,9 mg/kg  |

### 8.2. Exposure controls

### Appropriate engineering controls

Technical measures and the application of suitable work processes have priority over personal protection equipment.

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray.

## Individual protection measures, such as personal protective equipment

### Eye/face protection

Suitable eye protection: Face protection shield goggles.

## **Hand protection**

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Protective gloves are recommended Company KCL GmbH, D-36124 Eichenzell, email: vertrieb@kcl.de With specification (test according to EN374):

By long-term hand contact

Recommended glove articles: KCL 741 Dermatril® L Recommended material: NBR (Nitrile rubber) 0,11 mm Wearing time with permanent contact: > 480 min

By short-term hand contact

Recommended glove articles: KCL 741 Dermatril® L Recommended material: NBR (Nitrile rubber) 0,11 mm Wearing time with occasional contact (splashes): > 480 min

The breakthrough times stated above were determined by KCL in laboratory tests acc. to EN374 with samples of the recommended glove types. This recommendation applies only to the product stated in the safety data sheet<(>,<)> supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).

## Skin protection

Wear suitable protective clothing.



according to Regulation (EC) No 1907/2006

## Multielement-Standardlösung 20 Elemente je 10 mg/l mit 50 ml Salzsäure 37%/l

Revision date: 06.03.2024 Product code: 33688 Page 7 of 14

Protective clothing acid-resistant

### Respiratory protection

Respiratory protection necessary at: aerosol or mist formation

### Thermal hazards

No data available

#### **Environmental exposure controls**

Discharge into the environment must be avoided.

## **SECTION 9: Physical and chemical properties**

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

Physical state: Liquid
Colour: colourless
Odour: odourless
Odour threshold: No data available

Melting point/freezing point:

Boiling point or initial boiling point and

No data available

No data available

boiling range:

not applicable Flammability: Lower explosion limits: No data available Upper explosion limits: No data available Flash point: No data available Auto-ignition temperature: Decomposition temperature: No data available 0.5 pH-Value: Viscosity / kinematic: No data available Water solubility: easily soluble

Solubility in other solvents

not determined

Dissolution rate: No data available Partition coefficient n-octanol/water: No data available Dispersion stability: No data available Vapour pressure: No data available Vapour pressure: No data available Density: 1,0103 g/cm3 Relative density: No data available Bulk density: No data available Relative vapour density: No data available Particle characteristics: No data available

## 9.2. Other information

### Information with regard to physical hazard classes

Explosive properties

No data available

Sustaining combustion:

No data available

Self-ignition temperature

Solid: not applicable
Gas: not applicable

Oxidizing properties

No data available

Other safety characteristics

Evaporation rate:

Solvent separation test:

No data available

No data available



according to Regulation (EC) No 1907/2006

## Multielement-Standardlösung 20 Elemente je 10 mg/l mit 50 ml Salzsäure 37%/l

Revision date: 06.03.2024 Product code: 33688 Page 8 of 14

Solvent content: 0
Solid content: 0
Sublimation point: No data available

Sublimation point:

Softening point:

No data available

No data available

Pour point:

No data available

No data available:

Viscosity / dynamic:

No data available

No data available

Further Information
Corrosive to metals

## **SECTION 10: Stability and reactivity**

#### 10.1. Reactivity

Corrosive to metals.

## 10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

### 10.3. Possibility of hazardous reactions

The product develops hydrogen in an aqueous solution in contact with metals.

### 10.4. Conditions to avoid

Heat

### 10.5. Incompatible materials

Keep away from: Metal.

The product develops hydrogen in an aqueous solution in contact with metals.

### 10.6. Hazardous decomposition products

In case of fire may be liberated: SECTION 5: Firefighting measures

## **Further information**

No data available

## **SECTION 11: Toxicological information**

### 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

### Toxicocinetics, metabolism and distribution

There are no data available on the mixture itself.

### **Acute toxicity**

Based on available data, the classification criteria are not met.

## ATEmix calculated

ATE (oral) > 2000 mg/kg; ATE (dermal) > 2000 mg/kg; ATE (inhalation vapour) > 20 mg/l; ATE (inhalation dust/mist) > 5 mg/l



according to Regulation (EC) No 1907/2006

# Multielement-Standardlösung 20 Elemente je 10 mg/l mit 50 ml Salzsäure 37%/l

Revision date: 06.03.2024 Product code: 33688 Page 9 of 14

| CAS No    | Chemical name          |               |          |        |  |                    |  |
|-----------|------------------------|---------------|----------|--------|--|--------------------|--|
|           | Exposure route Dose \$ |               | Species  | Source | Method   |                    |  |
| 7697-37-2 | nitric acid            |               |          |        |  |                    |  |
|           | inhalation vapour      | ATE 2,6       | 5 mg/l   |        |  |                    |  |
| 7664-38-2 | phosphoric acid        |               |          |        |  |                    |  |
|           | oral                   | ATE<br>mg/kg  | 500      |        |  |                    |  |
| 7718-54-9 | nickel dichloride      |               |          |        |  |                    |  |
|           | oral                   | LD50<br>mg/kg | 500      | Rat    | Regul Toxicol and<br>Pharmacol<br>(doi.org/10. | OECD Guideline 425 |  |
|           | inhalation vapour      | ATE           | 3 mg/l   |        |  |                    |  |
|           | inhalation dust/mist   | ATE           | 0,5 mg/l |        |  |                    |  |

#### Irritation and corrosivity

Based on available data, the classification criteria are not met. slightly irritant but not relevant for classification.

### Sensitising effects

Based on available data, the classification criteria are not met. Contains nickel dichloride. May produce an allergic reaction.

### Carcinogenic/mutagenic/toxic effects for reproduction

Based on available data, the classification criteria are not met.

## STOT-single exposure

Based on available data, the classification criteria are not met.

# STOT-repeated exposure

Based on available data, the classification criteria are not met.

#### **Aspiration hazard**

Based on available data, the classification criteria are not met.

## Information on likely routes of exposure

There are no data available on the mixture itself.

# Specific effects in experiment on an animal

There are no data available on the mixture itself.

## Additional information on tests

There are no data available on the mixture itself.

## **Practical experience**

There are no data available on the mixture itself.

### 11.2. Information on other hazards

## **Endocrine disrupting properties**

There are no data available on the mixture itself.

#### Other information

There are no data available on the mixture itself.

#### **Further information**

Irritant

## **SECTION 12: Ecological information**

### **12.1. Toxicity**

Based on available data, the classification criteria are not met.



according to Regulation (EC) No 1907/2006

# Multielement-Standardlösung 20 Elemente je 10 mg/l mit 50 ml Salzsäure 37%/l

Revision date: 06.03.2024 Product code: 33688 Page 10 of 14

| CAS No    | Chemical name            |                  |           |           |  |   |   |
|-----------|--------------------------|------------------|-----------|-----------|--|---|---|
|           | Aquatic toxicity         | Dose             |           | [h]   [d] | Species  | Source  | Method  |
| 7647-01-0 | Hydrochloric acid        |                  |           |           |  |   |   |
|           | Acute fish toxicity      | LC50             | 862 mg/l  | 96 h      | Leuciscus idus   |   |   |
| 7697-37-2 | nitric acid              |                  |           |           |  |   |   |
|           | Acute fish toxicity      | LC50<br>mg/l     | 1559      | 96 h      | Topeka shiner  | Environmental<br>Toxicology and<br>Chemistry,     | other: ASTM<br>E729-26                        |
|           | Fish toxicity            | NOEC             | 268 mg/l  | 30 d      | juvenile Topeka shiner<br>and with juvenile<br>Fathead m | Study report<br>(2009)                            | Growth tests estimated the test chemical      |
|           | Algae toxicity           | NOEC<br>mg/l     | > 419     | 10 d      | several benthic<br>diatoms; see results                  | Marine Biology<br>43:307-315 (1977)               | Ten cultures of benthic diatoms were iso      |
|           | Acute bacteria toxicity  | EC50<br>mg/l ( ) | > 1000    | 3 h       | Activated sludge   | Study report<br>(2008)                            | OECD Guideline<br>209                         |
| 7664-38-2 | phosphoric acid          |                  |           |           |  |   |   |
|           | Acute algae toxicity     | ErC50<br>mg/l    | > 100     | 72 h      | Desmodesmus subspicatus                                  | Study report<br>(2010)                            | EU Method C.3                                 |
|           | Acute crustacea toxicity | EC50<br>mg/l     | > 100     | 48 h      | Daphnia magna  | Study report<br>(2010)                            | OECD Guideline<br>202                         |
|           | Acute bacteria toxicity  | EC50<br>mg/l ( ) | > 1000    | 3 h       | activated sludge of a predominantly domestic sewag       | Study report<br>(2010)                            | OECD Guideline<br>209                         |
| 7718-54-9 | nickel dichloride        |                  |           |           |  |   |   |
|           | Acute fish toxicity      | LC50<br>mg/l     | 15,3      | 96 h      | Oncorhynchus mykiss                                      | Aquatic<br>Toxicology 63<br>(2003) 65-82<br>(2003 | other: not<br>reported                        |
|           | Acute algae toxicity     | ErC50<br>mg/l    | 0,263     | 72 h      | Spermatozopsis exsultans                                 | Publication (2009)                                | OECD Guideline<br>201                         |
|           | Acute crustacea toxicity | EC50<br>mg/l     | > 0,2     | 48 h      | Ceriodaphnia dubia                                       | Environmental<br>Toxicology and<br>Chemistry.     | other: comparable<br>to USEPA,<br>Methods for |
|           | Fish toxicity            | NOEC<br>mg/l     | 0,04      | 8 d       | Danio rerio  | Arch. Environ.<br>Contam. Toxicol.<br>21:126-1    | other: Swedish<br>Standard SS 02<br>81 93     |
|           | Algae toxicity           | NOEC             | 0,6 mg/l  | 14 d      | Anabaena cylindrica                                      | Environ. Pollut.<br>(Series A).<br>25(4):241-2    | other: not<br>reported                        |
|           | Crustacea toxicity       | NOEC<br>mg/l     | 0,09      | 21 d      | Daphnia magna  | Water Res.<br>23(4):501-510<br>(1989)             | other: DIN 38412,<br>Part II                  |
|           | Acute bacteria toxicity  | EC50<br>)        | 33 mg/l ( | 0,5 h     | Activated sludge   | Journal of<br>Hazardous<br>Materials.<br>B139:332 | ISO 8192                                      |

## 12.2. Persistence and degradability

There are no data available on the mixture itself.

## 12.3. Bioaccumulative potential

There are no data available on the mixture itself.



according to Regulation (EC) No 1907/2006

## Multielement-Standardlösung 20 Elemente je 10 mg/l mit 50 ml Salzsäure 37%/l

Revision date: 06.03.2024 Product code: 33688 Page 11 of 14

#### BCF

| CAS No    | Chemical name     | BCF | Species          | Source               |
|-----------|-------------------|-----|------------------|----------------------|
| 7718-54-9 | nickel dichloride | 39  | Chlorella salina | J. Mar. Biol. Ass. U |

### 12.4. Mobility in soil

There are no data available on the mixture itself.

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

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

### 12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

#### 12.7. Other adverse effects

Discharge into the environment must be avoided.

#### **Further information**

There are no data available on the mixture itself.

## **SECTION 13: Disposal considerations**

### 13.1. Waste treatment methods

#### **Disposal recommendations**

Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste.

Send to a physico-chemical treatment facility under observation of official regulations. Do not empty into drains.

## Contaminated packaging

Handle contaminated packages in the same way as the substance itself.

The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

## **SECTION 14: Transport information**

### Land transport (ADR/RID)

| <u>14.1.</u> | <u>UN number</u> | or ID number: | UN | N 1789 |
|--------------|------------------|---------------|----|--------|
|              |                  |               |    |        |

14.2. UN proper shipping name: HYDROCHLORIC ACID

14.3. Transport hazard class(es): Ш 14.4. Packing group: Hazard label: 8 Classification code: C<sub>1</sub> **Special Provisions:** 520 Limited quantity: 5 L Excepted quantity: E1 Transport category: 3 Hazard No: 80 Tunnel restriction code: F

## Inland waterways transport (ADN)

14.1. UN number or ID number: UN 1789

14.2. UN proper shipping name: HYDROCHLORIC ACID

14.3. Transport hazard class(es):814.4. Packing group:IIIHazard label:8Classification code:C1Special Provisions:520Limited quantity:5 LExcepted quantity:E1

## Marine transport (IMDG)



according to Regulation (EC) No 1907/2006

## Multielement-Standardlösung 20 Elemente je 10 mg/l mit 50 ml Salzsäure 37%/l

Revision date: 06.03.2024 Product code: 33688 Page 12 of 14

14.1. UN number or ID number: UN 1789

14.2. UN proper shipping name: HYDROCHLORIC ACID

14.3. Transport hazard class(es):814.4. Packing group:IIIHazard label:8Special Provisions:223Limited quantity:5 LExcepted quantity:E1

Air transport (ICAO-TI/IATA-DGR)

EmS:

14.1. UN number or ID number: UN 1789

14.2. UN proper shipping name: HYDROCHLORIC ACID

14.3. Transport hazard class(es):814.4. Packing group:IIIHazard label:8Special Provisions:A3 A803Limited quantity Passenger:1 LPassenger LQ:Y841Excepted quantity:E1

IATA-packing instructions - Passenger:852IATA-max. quantity - Passenger:5 LIATA-packing instructions - Cargo:856IATA-max. quantity - Cargo:60 L

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

## **SECTION 15: Regulatory information**

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

F-A. S-B

## **EU** regulatory information

Restrictions on use (REACH, annex XVII):

Entry 27, Entry 75

Information according to Directive Not subject to 2012/18/EU (SEVESO III)

2012/18/EU (SEVESO III):

Marketing and use of explosives precursors (Regulation (EU) 2019/1148):

This product is regulated by Regulation (EU) 2019/1148: all suspicious transactions, and significant

disappearances and thefts should be reported to the relevant national contact point.

National regulatory information

Employment restrictions: Observe restrictions to employment for juveniles according to the 'juvenile

work protection guideline' (94/33/EC).

Water hazard class (D): 1 - slightly hazardous to water

## **SECTION 16: Other information**

#### Changes

This data sheet contains changes from the previous version in section(s): 9,12.



according to Regulation (EC) No 1907/2006

## Multielement-Standardlösung 20 Elemente je 10 mg/l mit 50 ml Salzsäure 37%/l

Revision date: 06.03.2024 Product code: 33688 Page 13 of 14

## Abbreviations and acronyms

Pyr. Sol: Pyrophoric solid

Water-react: Substance and mixture which, in contact with water, emits flammable gas

Ox. Liq: Oxidising liquid

Met. Corr: Substance or mixture corrosive to metals

Flam. Sol: Flammable solid Acute Tox: Acute toxicity Skin Corr: Skin corrosion Skin Irrit: Skin irritation Eye Dam: Eye damage

Resp. Sens: Respiratory sensitisation

Skin Sens: Skin sensitisation Muta: Germ cell mutagenicity

Carc: Carcinogenicity
Repr: Reproductive toxicity

STOT SE: Specific target organ toxicity - single exposure STOT RE: Specific target organ toxicity - repeated exposure

Aquatic Acute: Acute aquatic hazard Aquatic Chronic: Chronic aquatic hazard

ADR: Accord européen sur le transport des marchandises dangereuses par Route

(European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labelling of Chemicals EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service LC50: Lethal concentration, 50%

LD50: Lethal dose, 50%

#### 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    |

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

| ievanit ii and Ec | or statements (number and run text)  |
|-------------------|--|
| H272              | May intensify fire; oxidiser.  |
| H290              | May be corrosive to metals.  |
| H301              | Toxic if swallowed.  |
| H302              | Harmful if swallowed.  |
| H314              | Causes severe skin burns and eye damage.                                   |
| H315              | Causes skin irritation.  |
| H317              | May cause an allergic skin reaction.                                       |
| H318              | Causes serious eye damage.   |
| H331              | Toxic if inhaled.  |
| H334              | May cause allergy or asthma symptoms or breathing difficulties if inhaled. |
| H335              | May cause respiratory irritation.  |
| H341              | Suspected of causing genetic defects.                                      |
|                   |  |

H360D May damage the unborn child.H372 Causes damage to organs through prolonged or repeated exposure.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

May cause cancer by inhalation.

EUH071 Corrosive to the respiratory tract.

EUH208 Contains nickel dichloride. May produce an allergic reaction.

## **Further Information**

H350i

The above information describes exclusively the safety requirements of the product and is based on our

Print date: 06.03.2024



# **Safety Data Sheet**

according to Regulation (EC) No 1907/2006

# Multielement-Standardlösung 20 Elemente je 10 mg/l mit 50 ml Salzsäure 37%/l

Revision date: 06.03.2024 Product code: 33688 Page 14 of 14

present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

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