

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### Multielement-Standardlösung 21 Elemente je 20 mg/l in verdünnter Salpetersäure/Salzsäure (je 100ml/l)

Revision date: 11.06.2024

Product code: 28408

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

##### 1.1. Product identifier

Multielement-Standardlösung 21 Elemente je 20 mg/l in verdünnter Salpetersäure/Salzsäure (je 100ml/l)

UFI: EYNH-G2PC-A00P-D0KY

##### 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 number:

For Hazardous Materials [or Dangerous Goods] Incidents Spill, Leak, Fire, 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

Skin Corr. 1B; H314

Eye Dam. 1; H318

Full text of hazard statements: see SECTION 16.

##### 2.2. Label elements

###### Regulation (EC) No 1272/2008

###### Hazard components for labelling

nitric acid

Hydrochloric acid

Signal word: Danger

Pictograms:



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**Hazard statements**

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

**Precautionary statements**

- P260 Do not breathe dust/fume/gas/mist/vapours/spray.  
P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing 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.  
P310 Immediately call a POISON CENTER/doctor.

**Special labelling of certain mixtures**

- EUH071 Corrosive to the respiratory tract.  
EUH208 Contains nickel dinitrate. May produce an allergic reaction.

**2.3. Other hazards**

No information 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         | Quantity   |
|------------|--|---|--------------|------------------|------------|
|            |  | Classification (Regulation (EC) No 1272/2008) |              |                  |            |
| 7697-37-2  | nitric acid  |   |              |                  | 5 - < 10 % |
|            | 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  |   |              |                  |            |
| 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  |   |              |                  |            |
| 13138-45-9 | nickel dinitrate   |   |              |                  | < 0.01 %   |
|            | 236-068-5  |   | 028-012-00-1 | 01-2119492333-38 |            |
|            | Ox. Sol. 2, Carc. 1A, Muta. 2, Repr. 1B, Acute Tox. 4, Acute Tox. 4, Skin Irrit. 2, Eye Dam. 1, Resp. Sens. 1, Skin Sens. 1, STOT RE 1, Aquatic Acute 1, Aquatic Chronic 1; H272 H350i H341 H360D H332 H302 H315 H318 H334 H317 H372 H400 H410 |   |              |                  |            |

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

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**Specific Conc. Limits, M-factors and ATE**

| CAS No     | EC No     | Chemical name   | Quantity   |
|------------|-----------|---|------------|
|            |           | Specific Conc. Limits, M-factors and ATE  |            |
| 7697-37-2  | 231-714-2 | nitric acid   | 5 - < 10 % |
|            |           | 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   |            |
| 7647-01-0  | 231-595-7 | Hydrochloric acid   | 1 - < 5 %  |
|            |           | Skin Corr. 1B; H314: >= 25 - 100 Skin Irrit. 2; H315: >= 10 - < 25 Eye Irrit. 2; H319: >= 10 - < 25 STOT SE 3; H335: >= 10 - 100  |            |
| 13138-45-9 | 236-068-5 | nickel dinitrate  | < 0.01 %   |
|            |           | inhalation: ATE = 11 mg/l (vapours); inhalation: ATE = 1,5 mg/l (dusts or mists); oral: LD50 = 361,9 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<br>Aquatic Acute 1; H400: M=1<br>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 (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**

First aider: Pay attention to self-protection!

**After inhalation**

Provide fresh air.  
Call a physician immediately.

**After contact with skin**

Wash immediately with: Water  
Take off immediately all contaminated clothing and wash it before reuse.  
Call a physician immediately.

**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.  
Protect uninjured eye.

**After ingestion**

Rinse mouth immediately and drink plenty of water.  
Do NOT induce vomiting. Do not allow a neutralisation agent to be drunk.  
Call a physician immediately.

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

Causes burns.  
Irritant  
Cough  
Dyspnoea  
Vomiting  
Methaemoglobinaemia  
Risk of serious damage to eyes.  
Allergic reactions

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

No data available

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#### 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:

Nitrogen oxides (NO<sub>x</sub>)

Hydrogen chloride (HCl)

##### 5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus.

In case of fire and/or explosion do not breathe fumes.

Avoid contact with skin, eyes and clothes.

##### **Additional information**

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

Move undamaged containers from immediate hazard area if it can be done safely.

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.

Use personal protection equipment.

Avoid contact with skin, eyes and clothes.

Remove persons to safety.

Emergency procedures

Consult an expert

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**

Cover drains.

Prevent spread over a wide area (e.g. by containment or oil barriers).

Collect in closed and suitable containers for disposal.

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents).

###### **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.

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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**

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

When using do not eat, drink, smoke, sniff. Use personal protection equipment.

Provide adequate ventilation. Avoid contact with skin, eyes and clothes.

Do not breathe vapour/aerosol.

**Advice on protection against fire and explosion**

Usual measures for fire prevention.

**Advice on general occupational hygiene**

Keep away from food, drink and animal feedingstuffs. 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. Avoid: aerosol or mist formation Do not breathe

vapour/aerosol.

**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**

Corrosive to metals.

Unsuitable container/equipment material: Metal

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

**Further information on storage conditions**

Keep container tightly closed.

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

Laboratory chemicals

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

**8.1. Control parameters**

**Occupational exposure limits**

| CAS No    | Substance                             | ppm | mg/m <sup>3</sup> | fib/cm <sup>3</sup> | Category      | Origin |
|-----------|---------------------------------------|-----|-------------------|---------------------|---------------|--------|
| 7429-90-5 | Aluminium metal (Respirable Fraction) | -   | 1                 |                     | TWA (8 h)     |        |
| 7440-36-0 | Antimony                              | -   | 0.5               |                     | TWA (8 h)     |        |
| 7647-01-0 | Hydrogen chloride                     | 5   | 8                 |                     | TWA (8 h)     |        |
|           |                                       | 10  | 15                |                     | STEL (15 min) |        |
| 7697-37-2 | Nitric acid                           | 1   | 2.6               |                     | STEL (15 min) |        |

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**DNEL/DMEL values**

| CAS No                   | Substance         | Exposure route | Effect   | Value                 |
|--------------------------|-------------------|----------------|----------|-----------------------|
| 7647-01-0                | Hydrochloric acid |                |          |                       |
| Worker DNEL, long-term   |                   | inhalation     | local    | 8 mg/m <sup>3</sup>   |
| Worker DNEL, acute       |                   | inhalation     | local    | 15 mg/m <sup>3</sup>  |
| Consumer DNEL, long-term |                   | inhalation     | local    | 8 mg/m <sup>3</sup>   |
| Consumer DNEL, acute     |                   | inhalation     | local    | 15 mg/m <sup>3</sup>  |
| 13138-45-9               | nickel dinitrate  |                |          |                       |
| Consumer DNEL, acute     |                   | oral           | systemic | 0,012 mg/kg bw/day    |
| Consumer DNEL, long-term |                   | oral           | systemic | 0,02 mg/kg bw/day     |
| Worker DNEL, acute       |                   | inhalation     | systemic | 104 mg/m <sup>3</sup> |
| Worker DNEL, acute       |                   | inhalation     | local    | 1,6 mg/m <sup>3</sup> |
| Consumer DNEL, acute     |                   | inhalation     | systemic | 8,8 mg/m <sup>3</sup> |
| Consumer DNEL, acute     |                   | inhalation     | local    | 0,1 mg/m <sup>3</sup> |

**PNEC values**

| CAS No   | Substance        | Value       |
|--|------------------|-------------|
| 13138-45-9                                       | nickel dinitrate |             |
| 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.

**Individual protection measures, such as personal protective equipment**

**Eye/face protection**

goggles

Wear eye/face protection.

**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.

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

By long-term hand contact

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

By short-term hand contact

Trade name/designation: 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](http://www.kcl.de)).

#### Skin protection

Wear suitable protective clothing. Take off immediately all contaminated clothing.

Wash hands before breaks and after work.

The choice of body protection depends on the concentration and quantity of hazardous substances. The chemical resistance of protective agents must be clarified with their suppliers.

#### Respiratory protection

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

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.

#### Environmental exposure controls

Do not allow to enter into surface water or drains.

## SECTION 9: Physical and chemical properties

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

|   |                   |                     |
|---|-------------------|---------------------|
| Physical state:   | Liquid            |                     |
| Colour:   | yellow            |                     |
| Odour:  | like: Nitric acid |                     |
| Odour threshold:  | No data available |                     |
| Melting point/freezing point:                             |                   | No data available   |
| Boiling point or initial boiling point and boiling range: |                   | No data available   |
| Flammability:   |                   | not applicable      |
| Lower explosion limits:                                   |                   | No data available   |
| Upper explosion limits:                                   |                   | No data available   |
| Flash point:  |                   | No data available   |
| Auto-ignition temperature:                                |                   | No data available   |
| Decomposition temperature:                                |                   | not determined      |
| pH-Value:   |                   | <1                  |
| Viscosity / kinematic:                                    |                   | No data available   |
| Water solubility:   |                   | completely miscible |
| Solubility in other solvents                              |                   |                     |
| not determined  |                   |                     |

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|  |                          |
|--|--------------------------|
| 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:                               | 1,0703 g/cm <sup>3</sup> |
| 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:                    | No data available |
| Gas:                      | not applicable    |
| Oxidizing properties      |                   |
| Not oxidising.            |                   |

##### Other safety characteristics

|                          |                   |
|--------------------------|-------------------|
| Evaporation rate:        | not determined    |
| Solvent separation test: | No data available |
| Solvent content:         | 0                 |
| Solid content:           | 0                 |
| Sublimation point:       | No data available |
| Softening point:         | No data available |
| Pour point:              | No data available |
| No data available:       |                   |
| Viscosity / dynamic:     | No data available |
| Flow time:               | No data available |

##### Further Information

Corrosive to metals.

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Corrosive to metals. Possibility of hazardous reactions.

### 10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

### 10.3. Possibility of hazardous reactions

Alkali (lye)

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

Amines, Ammonia, Alcohols, Alkali metals, Hydrogen peroxide

Copper, Combustible solids, Solvent, Alkaline earth metal, mercury (Hg).

### 10.4. Conditions to avoid

No data available

### 10.5. Incompatible materials

Cellulose

Metal

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



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**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**

**Toxicokinetics, metabolism and distribution**

No data available

**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

| CAS No     | Chemical name        |                  |         |  |                    |
|------------|----------------------|------------------|---------|--|--------------------|
|            | Exposure route       | Dose             | Species | Source                                   | Method             |
| 7697-37-2  | nitric acid          |                  |         |  |                    |
|            | inhalation vapour    | ATE 2,65 mg/l    |         |  |                    |
| 13138-45-9 | nickel dinitrate     |                  |         |  |                    |
|            | oral                 | LD50 361,9 mg/kg | Rat     | Regul Toxicol and Pharmacol (doi.org/10. | OECD Guideline 425 |
|            | inhalation vapour    | ATE 11 mg/l      |         |  |                    |
|            | inhalation dust/mist | ATE 1,5 mg/l     |         |  |                    |

**Irritation and corrosivity**

Skin corrosion/irritation: Causes severe skin burns and eye damage.

Serious eye damage/eye irritation: Causes serious eye damage.

Corrosive to the respiratory tract.

Following ingestion Gastric perforation

Irritating to respiratory system.

Pulmonary oedema

see also Section 4

**Sensitising effects**

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

Contains nickel dinitrate. May produce an allergic reaction.

**Carcinogenic/mutagenic/toxic effects for reproduction**

Germ cell mutagenicity: Based on available data, the classification criteria are not met.

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

Reproductive toxicity: 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.

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

There are no data available on the preparation/mixture itself.

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

There are no data available on the preparation/mixture itself.

#### **Practical experience**

There are no data available on the preparation/mixture itself.

#### **11.2. Information on other hazards**

##### **Other information**

There are no data available on the preparation/mixture itself.

##### **Further information**

No data available

## **SECTION 12: Ecological information**

### **12.1. Toxicity**

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| CAS No     | Chemical name            |                  |             |         |  |   |
|------------|--------------------------|------------------|-------------|---------|--|---|
|            | Aquatic toxicity         | Dose             | [h]   [d]   | Species | Source   | Method  |
| 7697-37-2  | nitric acid              |                  |             |         |  |   |
|            | Acute fish toxicity      | LC50<br>mg/l     | 1559        | 96 h    | Topeka shiner                                      | Environmental Toxicology and Chemistry, other: ASTM E729-26               |
|            | Fish toxicity            | NOEC             | 268 mg/l    | 30 d    | juvenile Topeka shiner and with juvenile Fathead m | Study report (2009) Growth tests estimated the test chemical              |
|            | Algae toxicity           | NOEC<br>mg/l     | > 419       | 10 d    | several benthic diatoms; see results               | Marine Biology 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 (2008) OECD Guideline 209                                    |
| 7647-01-0  | Hydrochloric acid        |                  |             |         |  |   |
|            | Acute fish toxicity      | LC50             | 862 mg/l    | 96 h    | Leuciscus idus                                     |   |
| 13138-45-9 | nickel dinitrate         |                  |             |         |  |   |
|            | Acute fish toxicity      | LC50<br>mg/l     | 15,3        | 96 h    | Oncorhynchus mykiss                                | Aquatic Toxicology 63 (2003) 65-82 (2003) other: not reported             |
|            | Acute algae toxicity     | ErC50<br>mg/l    | 0,237       | 72 h    | Ankistrodesmus falcatus                            | Publication (2009) OECD Guideline 201                                     |
|            | Acute crustacea toxicity | EC50<br>mg/l     | 0,2663      | 48 h    | Ceriodaphnia dubia                                 | Study report (2004) other: American society of testing and m              |
|            | Fish toxicity            | NOEC<br>mg/l     | 0,057       | 32 d    | Pimephales promelas                                | Water Resources Research Institute. Kent other: ASTM 1980, E-729          |
|            | Algae toxicity           | NOEC             | 0,6 mg/l    | 14 d    | Anabaena cylindrica                                | Environ. Pollut. (Series A). 25(4):241-2 other: not reported              |
|            | Crustacea toxicity       | NOEC<br>mg/l     | 0,04        | 42 d    | Daphnia magna                                      | Wat. Res. 24(7):845-852 (1990) Chronic exposure to sublethal concentrat   |
|            | Acute bacteria toxicity  | EC50<br>)        | 33 mg/l ( ) | 0,5 h   | Activated sludge                                   | Journal of Hazardous Materials. B139:332 ISO 8192                         |

**12.2. Persistence and degradability**

The methods for determining the biological degradability are not applicable to inorganic substances.

**12.3. Bioaccumulative potential**

There are no data available on the mixture itself.

**BCF**

| CAS No     | Chemical name    | BCF | Species             | Source               |
|------------|------------------|-----|---------------------|----------------------|
| 13138-45-9 | nickel dinitrate | 23  | Spirodela polyrhiza | Ecotoxicology and en |

**12.4. Mobility in soil**

There are no data available on the mixture itself.

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

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The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.  
There are no data available on the mixture itself.

**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.

**Further information**

Do not allow to enter into surface water or drains.  
Discharge into the environment must be avoided.

**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.  
Dispose of waste according to "Kreislaufwirtschafts- und Abfallgesetz (KrW-/AbfG)".

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

|  |   |
|--|---|
| <b>14.1. UN number or ID number:</b>     | UN 1760   |
| <b>14.2. UN proper shipping name:</b>    | CORROSIVE LIQUID, N.O.S. (nitric acid, Hydrochloric acid) |
| <b>14.3. Transport hazard class(es):</b> | 8   |
| <b>14.4. Packing group:</b>              | II  |
| Hazard label:                            | 8   |
| Classification code:                     | C9  |
| Special Provisions:                      | 274   |
| Limited quantity:                        | 1 L   |
| Excepted quantity:                       | E2  |
| Transport category:                      | 2   |
| Hazard No:                               | 80  |
| Tunnel restriction code:                 | E   |

**Inland waterways transport (ADN)**

|  |   |
|--|---|
| <b>14.1. UN number or ID number:</b>     | UN 1760   |
| <b>14.2. UN proper shipping name:</b>    | CORROSIVE LIQUID, N.O.S. (nitric acid, Hydrochloric acid) |
| <b>14.3. Transport hazard class(es):</b> | 8   |
| <b>14.4. Packing group:</b>              | II  |
| Hazard label:                            | 8   |
| Classification code:                     | C9  |
| Special Provisions:                      | 274   |
| Limited quantity:                        | 1 L   |
| Excepted quantity:                       | E2  |

**Marine transport (IMDG)**

|  |   |
|--|---|
| <b>14.1. UN number or ID number:</b>     | UN 1760   |
| <b>14.2. UN proper shipping name:</b>    | CORROSIVE LIQUID, N.O.S. (Nitric acid, Hydrochloric acid) |
| <b>14.3. Transport hazard class(es):</b> | 8   |
| <b>14.4. Packing group:</b>              | II  |

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Hazard label: 8  
Special Provisions: 274  
Limited quantity: 1 L  
Excepted quantity: E2  
EmS: F-A, S-B

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

**14.1. UN number or ID number:** UN 1760  
**14.2. UN proper shipping name:** CORROSIVE LIQUID, N.O.S. (Nitric acid, Hydrochloric acid)  
**14.3. Transport hazard class(es):** 8  
**14.4. Packing group:** II  
Hazard label: 8  
Special Provisions: A3 A803  
Limited quantity Passenger: 0.5 L  
Passenger LQ: Y840  
Excepted quantity: E2  
IATA-packing instructions - Passenger: 851  
IATA-max. quantity - Passenger: 1 L  
IATA-packing instructions - Cargo: 855  
IATA-max. quantity - Cargo: 30 L

**14.5. Environmental hazards**

ENVIRONMENTALLY HAZARDOUS: No

**14.6. Special precautions for user**

No information available.

**14.7. Maritime transport in bulk according to IMO instruments**

not applicable

**SECTION 15: Regulatory information**

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

**EU regulatory information**

Restrictions on use (REACH, annex XVII):

Entry 3, Entry 27, Entry 75

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

Acquisition, introduction, possession or use of this product by the general public is restricted 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

**15.2. Chemical safety assessment**

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

**SECTION 16: Other information**

**Changes**

This data sheet contains changes from the previous version in section(s): 1,9.

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**Abbreviations and acronyms**

- Pyr. Sol: Pyrophoric solid
- Water-react: Substance and mixture which, in contact with water, emits flammable gas
- Ox. Liq: Oxidising liquid
- Ox. Sol: Oxidising solid
- 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    |
| Skin Corr. 1B; H314 | Calculation method       |
| Eye Dam. 1; H318    | Calculation method       |

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

- H272 May intensify fire; oxidiser.
- H290 May be corrosive to metals.
- 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.
- H332 Harmful 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.
- H350i May cause cancer by inhalation.
- 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.

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EUH071

Corrosive to the respiratory tract.

EUH208

Contains nickel dinitrate. May produce an allergic reaction.

#### **Further Information**

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

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