

# Multielement-Standardlösung "Multi-Std." 4 Kationen + 1 Anion in Wasser

Revision date: 22.04.2024

Product code: 31477

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

## 1.1. Product identifier

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## 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: Place:	Stempelstraße 6 D-47167 Duisburg	
Telephone: E-mail:	0203/5194-0 info@analytichem.de	Telefax: 0203/5194-290
Contact person: E-mail: Internet: Responsible Department:	Abteilung Produktsicherheit produktsicherheit@analytichem.de www.analytichem.de Abteilung Produktsicherheit	Telephone: 0203/5194-107/117
<u>1.4. Emergency telephone</u> 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**

## 2.2. Label elements

2.3. Other hazards

No data available

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

#### 3.2. Mixtures

Chemical characterization Mixtures in aqueous solution

#### **Relevant ingredients**

none (according to Regulation (EC) No 1907/2006 (REACH))

## **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



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## **General information**

Avoid contact with skin, eyes and clothes. Take off immediately all contaminated clothing.

## After inhalation

Provide fresh air. Call a physician immediately. 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. 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.

Rinse immediately carefully and thoroughly with eye-bath or water. In case of eye irritation 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. Call a doctor if you feel unwell.

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

Irritant Causes burns. 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: Nitrogen oxides (NOx) Metal oxide smoke, toxic

## 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.



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## SECTION 6: Accidental release measures

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

#### 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 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

Read label before use. Handle and open container with care. When using do not eat, drink, smoke, sniff. Use personal protection equipment. Use extractor hood (laboratory). Provide adequate ventilation. Avoid contact with skin, eyes and clothes.

## 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

Keep container tightly closed. Corrosive to metals.



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Unsuitable container/equipment material: Metal

#### Further information on storage conditions

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

#### 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

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.

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 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).

## 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 entrepeneur 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.



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## **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:	clear	
Odour:	odourless	
Melting point/freezing point:		No data available
Boiling point or initial boiling point and		No data available
boiling range:		
Flash point:		No data available
pH-Value:		acidic
Viscosity / kinematic:		No data available
Water solubility:		completely miscible
Solubility in other solvents		
No data available		
Partition coefficient n-octanol/water:		No data available
Vapour pressure:		No data available
Vapour pressure:		No data available
Density:		No data available
Bulk density:		No data available
Relative vapour density:		No data available
0.2. Other information		
Information with regard to physical haza	ard classes	
Explosive properties		
No data available		
Other safety characteristics		
Evaporation rate:		No data available
Solvent separation test:		No data available
Solvent content:		0
Solid content:		0
Sublimation point:		No data available
Softening point:		No data available
		No data available
Pour point:		
No data available:		<b>.</b>
No data available: Viscosity / dynamic:		No data available
No data available:		No data available No data available

No data available

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

## 10.1. Reactivity

<u>9</u>.

Corrosive to metals.

# 10.2. Chemical stability

No data available

## 10.3. Possibility of hazardous reactions

Alkali (lye)

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



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## 10.4. Conditions to avoid

No data available

## 10.5. Incompatible materials

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

#### 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

#### Irritation and corrosivity

Skin corrosion/irritation: Based on available data, the classification criteria are not met. Serious eye damage/eye irritation: Based on available data, the classification criteria are not met.

#### Sensitising effects

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

#### 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.

#### 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

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

## **SECTION 12: Ecological information**

## 12.2. Persistence and degradability

There are no data available on the mixture itself.



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## 12.3. Bioaccumulative potential

There are no data available on the mixture itself.

## 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. 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 allow to enter into surface water or 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)

14.2. UN proper shipping name:

#### **SECTION 15: Regulatory information**

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

(nitric acid)

#### EU regulatory information

Restrictions on use (REACH, annex XVII):

Entry 75

## National regulatory information

## **SECTION 16: Other information**

## **Further Information**

Provide appropriate information, instructions and training to users

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

The receiver of our product is singularly responsible for adhering to existing laws and regulations.



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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.)