

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Multielement-Standard 23 Elemente je 10 mg/lin verdünntem Säuregemisch

Revision date: 08.05.2025 Product code: 34429 Page 1 of 15

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

1.1. Product identifier

Multielement-Standard 23 Elemente je 10 mg/lin verdünntem Säuregemisch

UFI: NWA2-X3HJ-G00C-6F6E

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

Use of the substance/mixture

Reagents and laboratory chemicals
Only for laboratory and analysis purposes.

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,

<u>number:</u> 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 STOT SE 3; H335

Full text of hazard statements: see SECTION 16.

2.2. Label elements

Regulation (EC) No 1272/2008

Hazard components for labelling

Hydrochloric acid, nitric acid

Signal word: Danger

Pictograms:



Hazard statements

H290 May be corrosive to metals.



according to Regulation (EC) No 1907/2006

Multielement-Standard 23 Elemente je 10 mg/lin verdünntem Säuregemisch

Revision date: 08.05.2025 Product code: 34429 Page 2 of 15

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 and 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.

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 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 (Regulation (EC) No	1272/2008)	•			
7647-01-0	Hydrochloric acid			10 - < 15 %		
	231-595-7	017-002-01-X	01-2119484862-27			
	Met. Corr. 1, Skin Corr. 1B, Eye D	am. 1, STOT SE 3; H290 H314 H318	H335			
7697-37-2	nitric acid					
	231-714-2	007-030-00-3	01-2119487297-23			
	Ox. Liq. 3, Met. Corr. 1, Acute Tox EUH071	H290 H331 H314 H318				
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					
7761-88-8	silver nitrate			< 0.01 %		
	231-853-9	047-001-00-2	01-2119513705-43			
	Ox. Sol. 2, Met. Corr. 1, Skin Corr H290 H314 H318 H400 H410	. 1B, Eye Dam. 1, Aquatic Acute 1, Ac	quatic Chronic 1; H272			

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



Safety Data Sheet

according to Regulation (EC) No 1907/2006

Multielement-Standard 23 Elemente je 10 mg/lin verdünntem Säuregemisch

Revision date: 08.05.2025 Product code: 34429 Page 3 of 15

Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity	
	Specific Conc.	Limits, M-factors and ATE		
7647-01-0	231-595-7	Hydrochloric acid	10 - < 15 %	
	1	H314: >= 25 - 100		
7697-37-2	231-714-2	nitric acid	10 - < 15 %	
		2,65 mg/l (vapours) Ox. Liq. 3; H272: >= 65 - 100 Skin Corr. 1A; H314: >= 20 rr. 1B; H314: >= 5 - < 20		
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 Aquatic Acute 1; H400: M=1 Aquatic Chronic 1; H410: M=1			
7761-88-8	231-853-9	silver nitrate	< 0.01 %	
	1	= > 348 mg/kg; oral: LD50 = > 2000 mg/kg		

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



Safety Data Sheet

according to Regulation (EC) No 1907/2006

Multielement-Standard 23 Elemente je 10 mg/lin verdünntem Säuregemisch

Revision date: 08.05.2025 Product code: 34429 Page 4 of 15

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)

Hydrogen chloride (HCI)

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.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General advice

Do not breathe vapour/aerosol. 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).

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.



according to Regulation (EC) No 1907/2006

Multielement-Standard 23 Elemente je 10 mg/lin verdünntem Säuregemisch

Revision date: 08.05.2025 Product code: 34429 Page 5 of 15

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.

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

Do not breathe vapour/aerosol. Use extractor hood (laboratory).

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.

Hints on joint storage

national regulations

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/m³	fib/cm³	Category	Origin
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)	



according to Regulation (EC) No 1907/2006

Multielement-Standard 23 Elemente je 10 mg/lin verdünntem Säuregemisch

Revision date: 08.05.2025 Product code: 34429 Page 6 of 15

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
13138-45-9	nickel dinitrate			
Consumer DNI	EL, acute	oral	systemic	0,012 mg/kg bw/day
Consumer DNI	EL, long-term	oral	systemic	0,02 mg/kg bw/day
Worker DNEL,	acute	inhalation	systemic	104 mg/m³
Worker DNEL,	acute	inhalation	local	1,6 mg/m³
Consumer DNI	EL, acute	inhalation	systemic	8,8 mg/m³
Consumer DNI	EL, acute	inhalation	local	0,1 mg/m³
7761-88-8	silver nitrate			
Worker DNEL, long-term		inhalation	systemic	0,016 mg/m³
Consumer DNEL, long-term		inhalation	systemic	0,006 mg/m³
Consumer DNI	Consumer DNEL, long-term		systemic	0,02 mg/kg bw/day

PNEC values

CAS No	Substance	
Environmenta	Il compartment	Value
13138-45-9	nickel dinitrate	
Freshwater		0,0071 mg/l
Freshwater (ii	ntermittent releases)	0 mg/l
Marine water		0,0086 mg/l
Freshwater se	ediment	109 mg/kg
Marine sedim	ent	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
7761-88-8	silver nitrate	
Freshwater		0,00004 mg/l
Marine water		0,00086 mg/l
Freshwater sediment		438,13 mg/kg
Marine sediment		438,13 mg/kg
Micro-organisms in sewage treatment plants (STP)		0,025 mg/l
Soil		1,41 mg/kg

8.2. Exposure controls

Appropriate engineering controls

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



according to Regulation (EC) No 1907/2006

Multielement-Standard 23 Elemente je 10 mg/lin verdünntem Säuregemisch

Revision date: 08.05.2025 Product code: 34429 Page 7 of 15

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

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) 0,11mm 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

Respiratory protection necessary at: aerosol or mist formation

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.

Thermal hazards

No data available

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: like: Nitric acid
Odour threshold: No data available

Melting point/freezing point:

Boiling point or initial boiling point and

No data available

No data available

boiling range:

Flammability:

Lower explosion limits:

Upper explosion limits:

No data available

Vo data available

No data available

No data available

No data available



Safety Data Sheet

according to Regulation (EC) No 1907/2006

Multielement-Standard 23 Elemente je 10 mg/lin verdünntem Säuregemisch

Revision date: 08.05.2025 Product code: 34429 Page 8 of 15

Auto-ignition temperature:

Decomposition temperature:

PH-Value:

Viscosity / kinematic:

Water solubility:

No data available

No data available

acidic

No data available

completely miscible

Solubility in other solvents

No data available

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

9.2. Other information

Information with regard to physical hazard classes

Explosive properties

No data available

Sustained combustibility: No data available

Self-ignition temperature

Solid: No data available
Gas: No data available

Oxidizing properties
Oxidising agent

Evaporation rate:

Other safety characteristics

Solvent separation test:

Solvent content:

Solid content:

Sublimation point:

Softening point:

No data available

No data available:

Viscosity / dynamic:

Flow time:

No data available

No data available

Further Information

Corrosive to metals.

SECTION 10: Stability and reactivity

10.1. Reactivity

Corrosive to metals. Oxidising agent

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

No data available



Safety Data Sheet

according to Regulation (EC) No 1907/2006

Multielement-Standard 23 Elemente je 10 mg/lin verdünntem Säuregemisch

Revision date: 08.05.2025 Product code: 34429 Page 9 of 15

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.

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

CAS No	Chemical name					
	Exposure route	Dose		Species	Source	Method
7697-37-2	nitric acid					
	inhalation vapour	ATE 2,65	5 mg/l			
13138-45-9	nickel dinitrate					
	oral	LD50 mg/kg	361,9	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			
7761-88-8	silver nitrate					
	oral	LD50 mg/kg	> 2000	Rat	Study report (1993)	OECD Guideline 401
	dermal	LD50 mg/kg	> 348	Guinea pig	J. Vet. Med. Sci.73: 1417 - 1423. (2011)	OECD Guideline 434

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

Mucous membrane irritation in the mouth, throat, esophagus and gastrointestinal tract.

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.



Safety Data Sheet

according to Regulation (EC) No 1907/2006

Multielement-Standard 23 Elemente je 10 mg/lin verdünntem Säuregemisch

Revision date: 08.05.2025 Product code: 34429 Page 10 of 15

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

May cause respiratory irritation. (Hydrochloric acid)

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

There are no data available on the mixture itself.

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-Standard 23 Elemente je 10 mg/lin verdünntem Säuregemisch

Revision date: 08.05.2025 Product code: 34429 Page 11 of 15

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 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 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 mg/l ()	> 1000	3 h	Activated sludge	Study report (2008)	OECD Guideline 209
13138-45-9	nickel dinitrate						
	Acute fish toxicity	LC50 mg/l	15,3	96 h	Oncorhynchus mykiss	Aquatic Toxicology 63 (2003) 65-82 (2003	other: not reported
	Acute algae toxicity	ErC50 mg/l	0,237	72 h	Ankistrodesmus falcatus	Publication (2009)	OECD Guideline 201
	Acute crustacea toxicity	EC50 mg/l	0,2663	48 h	Ceriodaphnia dubia	Study report (2004)	other: American society of testing and m
	Fish toxicity	NOEC 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 mg/l	0,04	42 d	Daphnia magna	Wat. Res. 24(7):845-852 (1990)	Chronic exposure to sublethal concentrat
	Acute bacteria toxicity	EC50	33 mg/l (0,5 h	Activated sludge	Journal of Hazardous Materials. B139:332	ISO 8192
7761-88-8	silver nitrate						
	Acute fish toxicity	LC50 mg/l	0,0012	96 h	Pimephales promelas	Environmental Toxicology and Chemistry.	A guideline was not specified. The test
	Acute algae toxicity	ErC50 mg/l	0,0099	96 h	Pseudokirchneriella subcapitata	Environmental Science and Technology. 44	eline: U.S. Environmental Protection Age
	Acute crustacea toxicity	EC50 mg/l	0,00022	48 h	Daphnia magna	Environmental Toxicology and Chemistry.	The protective effect of reactive sulphi
	Fish toxicity	NOEC 0,00125 n	> ng/l	73 d	Oncorhynchus mykiss	Environmental Toxicology and Chemistry 2	other: ASTM 1241-98
	Algae toxicity	NOEC mg/l	0,0012	14 d	Champia parvula	in Bishop WE, Cardwell RD Heidolph BB (E	The toxicity tests lasted 11 days for th



Safety Data Sheet

according to Regulation (EC) No 1907/2006

Multielement-Standard 23 Elemente je 10 mg/lin verdünntem Säuregemisch						
Revision date: 08.05.2025		Pro	oduct code: 34429		Page 12	of 15
Crustacea toxicity	NOEC mg/l	0,00031	20 d Isonychia bicolour	Environmental Toxicology and Chemistry.	20 day sublethal effects on representati	

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
7761-88-8	silver nitrate	70	Cyprinus carpio	Water, Air and Soil

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.

Harmful effect due to pH shift.

Forms corrosive mixtures with water even if diluted.

Further information

Do not allow to enter into surface water or drains

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)

UN 3264 14.1. UN number or ID number:

CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Hydrochloric acid, 14.2. UN proper shipping name:

nitric acid)

8 14.3. Transport hazard class(es): 14.4. Packing group: Ш Hazard label: 8 Classification code: C₁ **Special Provisions:** 274 Limited quantity: 1 L Excepted quantity: E2 Transport category: 2



Safety Data Sheet

according to Regulation (EC) No 1907/2006

Multielement-Standard 23 Elemente je 10 mg/lin verdünntem Säuregemisch

Revision date: 08.05.2025 Product code: 34429 Page 13 of 15

Hazard No: 80
Tunnel restriction code: E

Inland waterways transport (ADN)

14.1. UN number or ID number: UN 3264

14.2. UN proper shipping name: CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Hydrochloric acid,

nitric acid)

14.3. Transport hazard class(es):814.4. Packing group:IIHazard label:8Classification code:C1Special Provisions:274Limited quantity:1 LExcepted quantity:E2

Marine transport (IMDG)

14.1. UN number or ID number: UN 3264

14.2. UN proper shipping name: CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Hydrochloric acid,

nitric acid)

14.3. Transport hazard class(es): 8 14.4. Packing group: П Hazard label: 8 Special Provisions: 274 Limited quantity: 1 I Excepted quantity: F2 EmS: F-A. S-B Segregation group: 1 - acids

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number or ID number: UN 3264

14.2. UN proper shipping name: CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Hydrochloric acid,

nitric acid)

14.3. Transport hazard class(es):814.4. Packing group:IIHazard label:8Special Provisions:A3 A803Limited quantity Passenger:0.5 LPassenger LQ:Y840Excepted quantity:E2

IATA-packing instructions - Passenger:851IATA-max. quantity - Passenger:1 LIATA-packing instructions - Cargo:855IATA-max. quantity - Cargo:30 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

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.



according to Regulation (EC) No 1907/2006

Multielement-Standard 23 Elemente je 10 mg/lin verdünntem Säuregemisch

Revision date: 08.05.2025 Product code: 34429 Page 14 of 15

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): 2 - obviously hazardous to water

SECTION 16: Other information

Changes

This data sheet contains changes from the previous version in section(s): 1,2,3.

Abbreviations and acronyms

Ox. Liq: Oxidising liquid Ox. Sol: Oxidising solid

Met. Corr: Substance or mixture corrosive to metals

Acute Tox: Acute toxicity Skin Corr: Skin corrosion Skin Irrit: Skin irritation Eve Dam: Eve 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

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
STOT SE 3; H335	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.

EUH071 Corrosive to the respiratory tract.

EUH208 Contains nickel dinitrate. May produce an allergic reaction.



Safety Data Sheet

according to Regulation (EC) No 1907/2006

Multielement-Standard 23 Elemente je 10 mg/lin verdünntem Säuregemisch

Revision date: 08.05.2025 Product code: 34429 Page 15 of 15

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. 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. Provide appropriate information, instructions and training to users

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