

Multielement-Standard 12 Elemente in verdünntem Säuregemisch

Revision date: 07.11.2022

Product code: 34206

Page 1 of 14

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

1.1. Product identifier

Multielement-Standard 12 Elemente in verdünntem Säuregemisch

UFI: XRQ1-23M1-6000-QA81

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:	Fa. Bernd Kraft GmbH	
Street:	Stempelstraße 6	
Place:	D-47167 Duisburg	
Telephone:	0203/5194-0	Telefax: 0203/5194-290
e-mail:	info@berndkraft.de	
Contact person:	Abteilung Produktsicherheit	Telephone: 0203/5194-107/117
e-mail:	produktsicherheit@berndkraft.de	
Internet:	www.berndkraft.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

inapplicable, this product is a mixture REACH registration number see section 3

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GB CLP Regulation

Met. Corr. 1; H290
Skin Corr. 1B; H314
Eye Dam. 1; H318

Full text of hazard statements: see SECTION 16.

2.2. Label elements

GB CLP Regulation

Hazard components for labelling

Hydrochloric acid
nitric acid
Calcium nitrate tetrahydrate

Signal word: Danger

Pictograms:



Safety Data Sheet

according to UK REACH Regulation

Multielement-Standard 12 Elemente in verdünntem Säuregemisch

Revision date: 07.11.2022

Product code: 34206

Page 2 of 14

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.
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

Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (GB CLP Regulation)			
7647-01-0	Hydrochloric acid			5 - < 10 %
	231-595-7	017-002-01-X	01-2119484862-27	
	Skin Corr. 1B, STOT SE 3; H314 H335			
7697-37-2	nitric acid			1 - < 5 %
	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			
13477-34-4	Calcium nitrate tetrahydrate			1 - < 5 %
	233-332-1		01-2119495093-35	
	Ox. Sol. 3, Acute Tox. 4, Eye Dam. 1; H272 H302 H318			
13138-45-9	nickel dinitrate			< 0.1 %
	236-068-5	028-012-00-1		
	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.

Multielement-Standard 12 Elemente in verdünntem Säuregemisch

Revision date: 07.11.2022

Product code: 34206

Page 3 of 14

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	5 - < 10 %
		Skin Corr. 1B; H314: >= 25 - 100 Skin Irrit. 2; H315: >= 10 - < 25 Eye Irrit. 2; H319: >= 10 - < 25 STOT SE 3; H335: >= 10 - 100	
7697-37-2	231-714-2	nitric acid	1 - < 5 %
		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	
13477-34-4	233-332-1	Calcium nitrate tetrahydrate	1 - < 5 %
		dermal: LD50 = > 2000 mg/kg; oral: LD50 = > 300 - < 2000 mg/kg	
13138-45-9	236-068-5	nickel dinitrate	< 0.1 %
		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	

Further Information

No data available

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.
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

Multielement-Standard 12 Elemente in verdünntem Säuregemisch

Revision date: 07.11.2022

Product code: 34206

Page 4 of 14

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_x)

Hydrogen chloride (HCl)

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.

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

Multielement-Standard 12 Elemente in verdünntem Säuregemisch

Revision date: 07.11.2022

Product code: 34206

Page 5 of 14

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

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m ³	fibres/ml	Category	Origin
7647-01-0	Hydrogen chloride (gas and aerosol mists)	1	2		TWA (8 h)	WEL
		5	8		STEL (15 min)	WEL
7697-37-2	Nitric acid	1	2.6		STEL (15 min)	WEL

Multielement-Standard 12 Elemente in verdünntem Säuregemisch

Revision date: 07.11.2022

Product code: 34206

Page 6 of 14

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/m ³
Worker DNEL, acute	inhalation	local	15 mg/m ³
Consumer DNEL, long-term	inhalation	local	8 mg/m ³
Consumer DNEL, acute	inhalation	local	15 mg/m ³
13477-34-4	Calcium nitrate tetrahydrate		
Consumer DNEL, acute	oral	systemic	10 mg/kg bw/day
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 ³
Worker DNEL, acute	inhalation	local	1,6 mg/m ³
Consumer DNEL, acute	inhalation	systemic	8,8 mg/m ³
Consumer DNEL, acute	inhalation	local	0,1 mg/m ³

PNEC values

CAS No	Substance	
Environmental compartment	Value	
13477-34-4	Calcium nitrate tetrahydrate	
Micro-organisms in sewage treatment plants (STP)	18 mg/l	
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

Suitable examples are gloves of KCL GmbH, D-36124 Eichenzell, e-mail: vertrieb@kcl.de with the following specification (test according to EN 374):

Multielement-Standard 12 Elemente in verdünntem Säuregemisch

Revision date: 07.11.2022

Product code: 34206

Page 7 of 14

By long-term hand contact
Recommended glove articles: KCL 741 Dermatrill® 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 Dermatrill® 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.

Respiratory protection

Respiratory protection necessary at: aerosol or mist formation

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:	colourless	
Odour:	stinging	
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		
Solid/liquid:		No data available
Gas:		No data available
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:		No data available
pH-Value:		0,5
Viscosity / kinematic:		No data available
Water solubility:		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
Vapour pressure:		No data available

Multielement-Standard 12 Elemente in verdünntem Säuregemisch

Revision date: 07.11.2022

Product code: 34206

Page 8 of 14

Vapour pressure:	No data available
Density:	1,07882 g/cm ³
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:	No data available
Gas:	No data available
Oxidizing properties	
Oxidising agent	

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
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.
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
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

Multielement-Standard 12 Elemente in verdünntem Säuregemisch

Revision date: 07.11.2022

Product code: 34206

Page 9 of 14

Further information

No data available

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in GB CLP Regulation

Toxicokinetics, metabolism and distribution

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

Acute toxicity

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

ATEmix calculated

ATE (oral) 12220,0 mg/kg; ATE (inhalation vapour) 59,65 mg/l

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
7697-37-2	nitric acid				
	inhalation vapour	ATE 2,65 mg/l			
13477-34-4	Calcium nitrate tetrahydrate				
	oral	LD50 > 300 - < 2000 mg/kg	Rat	Study report (2010)	OECD Guideline 423
	dermal	LD50 > 2000 mg/kg	Rat	Study report (2007)	OECD Guideline 402
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

Causes severe skin burns and eye damage.
Causes serious eye damage.
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

Contains nickel dinitrate. 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 preparation/mixture itself.

Specific effects in experiment on an animal

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

Safety Data Sheet

according to UK REACH Regulation

Multiement-Standard 12 Elemente in verdünntem Säuregemisch

Revision date: 07.11.2022

Product code: 34206

Page 10 of 14

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

Endocrine disrupting properties

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

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

12.1. Toxicity

There are no data available on the mixture itself.

Safety Data Sheet

according to UK REACH Regulation

Multielement-Standard 12 Elemente in verdünntem Säuregemisch

Revision date: 07.11.2022

Product code: 34206

Page 11 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	1559 mg/l	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	> 419 mg/l	10 d	several benthic diatoms; see results	Marine Biology 43:307-315 (1977) Ten cultures of benthic diatoms were iso
	Acute bacteria toxicity	(EC50	> 1000 mg/l)	3 h	Activated sludge	Study report (2008) OECD Guideline 209
13477-34-4	Calcium nitrate tetrahydrate					
	Acute fish toxicity	LC50	1378 mg/l	96 h	Poecilia reticulata	Water res. 11(10):927-935 (1977) OECD Guideline 203
	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
13138-45-9	nickel dinitrate					
	Acute fish toxicity	LC50	15,3 mg/l	96 h	Oncorhynchus mykiss	Aquatic Toxicology 63 (2003) 65-82 (2003) other: not reported
	Acute algae toxicity	ErC50	0,237 mg/l	72 h	Ankistrodesmus falcatus	Publication (2009) OECD Guideline 201
	Acute crustacea toxicity	EC50	0,2663 mg/l	48 h	Ceriodaphnia dubia	Study report (2004) other: American society of testing and m
	Fish toxicity	NOEC	0,057 mg/l	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	0,04 mg/l	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

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.

Multielement-Standard 12 Elemente in verdünntem Säuregemisch

Revision date: 07.11.2022

Product code: 34206

Page 12 of 14

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

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

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)

- 14.1. UN number or ID number:** UN 3264
- 14.2. UN proper shipping name:** CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (nitric acid, Hydrochloric acid)
- 14.3. Transport hazard class(es):** 8
- 14.4. Packing group:** II
- Hazard label: 8
- Classification code: C1
- Special Provisions: 274
- Limited quantity: 1 L
- Excepted quantity: E2
- Transport category: 2
- 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. (nitric acid, Hydrochloric acid)
- 14.3. Transport hazard class(es):** 8
- 14.4. Packing group:** II
- Hazard label: 8

Multielement-Standard 12 Elemente in verdünntem Säuregemisch

Revision date: 07.11.2022

Product code: 34206

Page 13 of 14

Classification code: C1
Special Provisions: 274
Limited quantity: 1 L
Excepted 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. (nitric acid, Hydrochloric acid)
14.3. Transport hazard class(es): 8
14.4. Packing group: II
Hazard label: 8
Special Provisions: 274
Limited quantity: 1 L
Excepted quantity: E2
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. (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

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 28, Entry 75

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

Classification for mixtures and used evaluation method according to GB CLP Regulation

Classification	Classification procedure
Met. Corr. 1; H290	On basis of test data
Skin Corr. 1B; H314	Calculation method
Eye Dam. 1; H318	Calculation method

Safety Data Sheet

according to UK REACH Regulation

Multielement-Standard 12 Elemente in verdünntem Säuregemisch

Revision date: 07.11.2022

Product code: 34206

Page 14 of 14

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.

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.

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