

# Multielement-Standard 6 Elemente je 100 mg/lin Flusssäure 1 %

Revision date: 15.04.2024

Product code: 34738

Page 1 of 14

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

#### 1.1. Product identifier

Multielement-Standard 6 Elemente je 100 mg/lin Flusssäure 1 %

UFI:

PE63-A3T7-4008-MX8C

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

### Use of the substance/mixture

Laboratory chemicals

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

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

### Uses advised against

Do not use for private purposes (household).

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

Company name:	AnalytiChem GmbH	
	ACD	
Street:	Stempelstraße 6	
Place:	D-47167 Duisburg	
Telephone:	0203/5194-0	Telefax: 0203/5194-290
E-mail:	info@analytichem.de	
Contact person:	Abteilung Produktsicherheit	Telephone: 0203/5194-107/117
E-mail:	produktsicherheit@analytichem.de	
Internet:	www.analytichem.de	
Responsible Department:	Abteilung Produktsicherheit	
1.4. Emergency telephone	For Hazardous Materials [or Dangero	ous Goods] Incidents Spill, Leak, Fire,
number:	•	EC Day or Night Within USA and Canada: anada: +1 703-741-5970 (collect calls

**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

Acute Tox. 3; H311 Acute Tox. 4; H302 Acute Tox. 4; H332 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 Hydrofluoric acid nitric acid Signal word: Danger



### Multielement-Standard 6 Elemente je 100 mg/lin Flusssäure 1 %

Revision date: 15.04.2024

Product code: 34738

Page 2 of 14





### Hazard statements

H302+H332	Harmful if swallowed or if inhaled.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.

### **Precautionary statements**

	<b>,</b>	
P260		Do not breathe dust/fume/gas/mist/vapours/spray.
P264		Wash hands and face thoroughly after handling.
P280		Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
P303+P3	61+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
P305+P3	851+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.

# Additional advice on labelling

No information available.

# 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 (Regulati	on (EC) No 1272/2008)		
7664-39-3	B Hydrofluoric acid %			1 - < 5 %
	231-634-8	009-003-00-1	01-2119458860-33	
	Acute Tox. 1, Acute To	x. 2, Acute Tox. 2, Skin Corr. 1A; H31	0 H330 H300 H314	
7697-37-2	nitric acid			< 1 %
	231-714-2	007-030-00-3	01-2119487297-23	
	Ox. Liq. 3, Met. Corr. 1, Acute Tox. 3, Skin Corr. 1A; H272 H290 H331 H314 EUH071			

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

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

CAS No	EC No	Chemical name	Quantity	
	Specific Conc. Limits, M-factors and ATE			
7664-39-3	231-634-8	Hydrofluoric acid %		
	inhalation: ATE = 0,5 mg/l (vapours); inhalation: ATE = 0,05 mg/l (dusts or mists); inhalation: LC50 = 2240 ppm (gases); dermal: ATE = 5 mg/kg; oral: ATE = 5 mg/kg Skin Corr. 1A; H314: >= 7 - 100 Skin Corr. 1B; H314: >= 1 - < 7 Eye Irrit. 2; H319: >= 0,1 - < 1			
7697-37-2	231-714-2	nitric acid	< 1 %	
	inhalation: ATE 2,65 mg/l (vapours) Ox. Liq. 3; H272: >= 65 - 100 Skin Corr. 1A; H314: >= 20 - 100 Skin Corr. 1B; H314: >= 5 - < 20			



according to Regulation (EC) No 1907/2006

### Multielement-Standard 6 Elemente je 100 mg/lin Flusssäure 1 %

Revision date: 15.04.2024

Product code: 34738

Page 3 of 14

#### **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! Remove affected person from the danger area and lay down. Call a physician immediately.

#### After inhalation

Provide fresh air.

If breathing is irregular or stopped, administer artificial respiration. Call a physician immediately.

#### After contact with skin

Rinse with plenty of water for at least 10 minutes. Immediately remove contaminated clothes. Apply calcium gluconate gel (preparation: boil 5 g of calcium gluconate in 85 ml of hot distilled water, add 10 g glycerol. Allow 5 g of Carmellose-sodium to swell in the hot solution. Stable for 6 months, store in a cool place) and massage into the skin until the pain subsides, in between rinse with water and apply fresh gel. Continue gel therapy for another 15 minutes after the pain has subsided. If no calcium gluconate gel is available, apply several dressings thoroughly moistened with 20 % calcium gluconate solution. Medical advice absolutely required!

#### 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

Never give anything by mouth to an unconscious person or a person with cramps. Rinse mouth immediately and drink plenty of water. Adverse human health effects and symptoms: Gastric perforation Remove casualty to fresh air and keep warm and at rest. Call a physician immediately.

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

Irritant Causes burns. Cough Dyspnoea Risk of serious damage to eyes. Gastric perforation Circulatory collapse Pulmonary oedema Vomiting seizures Pneumonia

### **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



### Multielement-Standard 6 Elemente je 100 mg/lin Flusssäure 1 %

Revision date: 15.04.2024

Product code: 34738

Page 4 of 14

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

Non-combustible liquids Hazardous combustion products In case of fire may be liberated: Hydrogen fluoride

#### 5.3. Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing. Full protection suit. In case of fire and/or explosion do not breathe fumes. Use water spray jet to protect personnel and to cool endangered containers.

### Additional information

Suppress gases/vapours/mists with water spray jet.

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.

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

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

#### **General advice**

Do not breathe vapour/aerosol.

#### For non-emergency personnel

Provide adequate ventilation. Use personal protection equipment. Avoid contact with skin, eyes and clothes. Remove persons to safety. Emergency procedures Do not breathe dust/fume/gas/mist/vapours/spray.

#### For emergency responders

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

### 6.2. Environmental precautions

Do not allow to enter into surface water or drains.

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

For containment

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. 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

Avoid exposure - obtain special instructions before use. Read label before use. Handle and open container with care.



according to Regulation (EC) No 1907/2006

### Multielement-Standard 6 Elemente je 100 mg/lin Flusssäure 1 %

Revision date: 15.04.2024

Product code: 34738

Page 5 of 14

When using do not eat, drink, smoke, sniff. Keep container tightly closed. 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. Make available sufficient washing facilities Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme. Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat or drink.

### Further information on handling

Draw up and observe skin protection programme. Wash hands and face before breaks and after work and take a shower if necessary. Take off immediately all contaminated clothing and wash it before reuse. If handled uncovered, arrangements with local exhaust ventilation have to be used.

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

### Requirements for storage rooms and vessels

Keep container tightly closed. Keep locked up. Store in a place accessible by authorized persons only. Provide adequate ventilation as well as local exhaustion at critical locations.

### Further information on storage conditions

Store in a dry place. Suitable container/equipment material: plastic Unsuitable container/equipment material: Metal Glass

#### 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
7440-36-0	Antimony	-	0.5		TWA (8 h)	
7664-39-3	Hydrogen fluoride (as F)	1.8	1.5		TWA (8 h)	
		3	2.5		STEL (15 min)	
7697-37-2	Nitric acid	1	2.6		STEL (15 min)	
7440-31-5	Tin (Metal)	-	2		TWA (8 h)	
7440-33-7	Tungsten metal	-	5		TWA (8 h)	
		-	10		STEL (15 min)	

#### Biological limit values

CAS No	Substance	Parameter	Value	Test material	Sampling time
7664-39-3	Hydrogen fluoride	Fluoride	3 mg/L	Urine	End of shift



according to Regulation (EC) No 1907/2006

### Multielement-Standard 6 Elemente je 100 mg/lin Flusssäure 1 %

Revision date: 15.04.2024

Product code: 34738

Page 6 of 14

### **DNEL/DMEL** values

CAS No	Substance				
DNEL type		Exposure route	Effect	Value	
7664-39-3	Hydrofluoric acid %				
Worker DNEL	., long-term	inhalation	systemic	1,5 mg/m³	
Worker DNEL	., acute	inhalation	systemic	2,5 mg/m³	
Worker DNEL	., long-term	inhalation	local	1,5 mg/m³	
Worker DNEL	., acute	inhalation	local	2,5 mg/m³	
Consumer DN	NEL, long-term	inhalation	systemic	0,03 mg/m³	
Consumer DN	NEL, acute	inhalation	systemic	0,03 mg/m³	
Consumer DN	NEL, long-term	inhalation	local	0,2 mg/m³	
Consumer DN	IEL, acute	inhalation	local	1,25 mg/m³	
Consumer DN	IEL, long-term	oral	systemic	0,01 mg/kg bw/day	
Consumer DN	IEL, acute	oral	systemic	0,01 mg/kg bw/day	
7440-31-5	tin				
Worker DNEL	., long-term	inhalation	systemic	71 mg/m³	
Worker DNEL	., long-term	dermal	systemic	10 mg/kg bw/day	
Consumer DN	NEL, long-term	inhalation	systemic	17 mg/m³	
Consumer DN	NEL, long-term	dermal	systemic	80 mg/kg bw/day	
Consumer DN	NEL, long-term	oral	systemic	5 mg/kg bw/day	

#### **PNEC** values

CAS No	Substance				
Environmental	Environmental compartment Value				
7664-39-3	54-39-3 Hydrofluoric acid %				
Freshwater		0,89 mg/l			
Marine water 0,089 mg/l					
Freshwater sediment 3,38 mg/kg					
Marine sediment 0,338 mg/l					
Micro-organisms in sewage treatment plants (STP) 51 m					
Soil	Soil				

### 8.2. Exposure controls

### Appropriate engineering controls

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe

gas/fumes/vapour/spray.

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

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

### Eye/face protection

Suitable eye protection: goggles Face protection umbrella

### 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



according to Regulation (EC) No 1907/2006

### Multielement-Standard 6 Elemente je 100 mg/lin Flusssäure 1 %

Revision date: 15.04.2024

Product code: 34738

Page 7 of 14

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 contactTrade name/designation:KCL 741 Dermatril® LRecommended material:NBR (Nitrile rubber) 0,11 mmWearing time with permanent contact:> 480 min

By short-term hand contact

Trade name/designation:KCL 741 Dermatril® LRecommended material:NBR (Nitrile rubber) 0,11 mmWearing 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: Colour: Odour: Odour threshold:	Liquid colourless odourless No data available	
Melting point/freezing point: Boiling point or initial boiling point and boiling range:		No data available No data available
Flammability: Lower explosion limits:		not applicable not determined
Upper explosion limits: Flash point: Auto-ignition temperature: Decomposition temperature:		not determined X No data available not determined



Multielement-Standar	d 6 Elemente je 100 mg/lin Flusssäure 1 %	
Revision date: 15.04.2024	Product code: 34738	Page 8 of 14
pH-Value:	1,3	
Viscosity / kinematic:	not determined	
Water solubility:	Soluble in: Water	
Solubility in other solvents		
not determined		
Dissolution rate:	No data available	
Partition coefficient n-octanol/water:	not determined	
Dispersion stability:	No data available	
Vapour pressure:	not determined	
Vapour pressure:	not determined	
Density:	1,004 g/cm <sup>3</sup>	
Relative density:	No data available	
Bulk density:	No data available	
Relative vapour density:	not determined	
Particle characteristics:	No data available	
9.2. Other information		
Information with regard to physical hazard class	es	
Explosive properties		
No data available		
Sustaining combustion:	No data available	
Self-ignition temperature		
Solid:	not applicable	
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:	not determined	
Flow time:	not determined	
Further Information		
No data available		
SECTION 10: Stability and reactivity		

#### -

### 10.1. Reactivity

No data available

# 10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

### 10.3. Possibility of hazardous reactions

Alkali metals Fluorine permanganates, e.g. potassium permanganate Alkali (lye) Metal Nitric acid



an analyti**chem** brand

# according to Regulation (EC) No 1907/2006

## Multielement-Standard 6 Elemente je 100 mg/lin Flusssäure 1 %

Revision date: 15.04.2024

Product code: 34738

Page 9 of 14

Acetic anhydride Ammonia (NH3) sulphuric acid Sodium and potassium hydroxide

#### 10.4. Conditions to avoid

Radiant heat.

### 10.5. Incompatible materials

Metal Glass

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

#### 10.6. Hazardous decomposition products

In case of fire: 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

Avoid exposure - obtain special instructions before use.

#### Acute toxicity

Toxic in contact with skin. Harmful if swallowed. Harmful if inhaled. If swallowed danger of perforation of the esophagus and the stomach (strong corrosive effects). Causes poorly healing wounds. Irritant Causes burns. Cough Dyspnoea Risk of serious damage to eyes. Gastric perforation Circulatory collapse Pulmonary oedema Vomiting seizures Pneumonia **ATEmix calculated** 

ATE (oral) 498,5 mg/kg; ATE (dermal) 498,5 mg/kg; ATE (inhalation vapour) 48,62 mg/l; ATE (inhalation dust/mist) 4,985 mg/l



### Multielement-Standard 6 Elemente je 100 mg/lin Flusssäure 1 %

Revision date: 15.04.2024

Product code: 34738

Page 10 of 14

CAS No	Chemical name						
	Exposure route	Dose		Species	Source	Method	
7664-39-3	Hydrofluoric acid %						
	oral	ATE	5 mg/kg				
	dermal	ATE	5 mg/kg				
	inhalation vapour	ATE	0,5 mg/l				
	inhalation dust/mist	ATE	0,05 mg/l				
	inhalation (1 h) gas	LC50 ppm	2240	Rat	Study report (1990)	OECD Guideline 403	
7697-37-2	nitric acid						
	inhalation vapour	ATE 2,6	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.

#### 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.

No data available

### Information on likely routes of exposure

No data available

### Specific effects in experiment on an animal

No data available

### Additional information on tests

No data available

#### Practical experience No data available

NO Gala available

### 11.2. Information on other hazards

Endocrine disrupting properties No data available

#### Other information

No data available

#### Further information

Following ingestion gastric perforation Liver and kidney damage Risk of serious damage to eyes.

### **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 6 Elemente je 100 mg/lin Flusssäure 1 %

Revision date: 15.04.2024

Product code: 34738

Page 11 of 14

CAS No	Chemical name							
	Aquatic toxicity	Dose		[h]   [d]	Species	Source	Method	
7664-39-3	Hydrofluoric acid %							
	Acute fish toxicity	LC50	299 mg/l	96 h	Salmo trutta	REACh Registration Dossier	other: U.S Environmental Protection Agen	
	Acute algae toxicity	ErC50	43 mg/l	96 h	various algae species	REACh Registration Dossier	Methods not detailed in the review.	
	Crustacea toxicity	NOEC	3,7 mg/l	21 d	Daphnia magna	REACh Registration Dossier	The publication is a review article of v	
	Acute bacteria toxicity	EC50 mg/l()	2930	3 h	Activated sludge	REACh Registration Dossier	ISO 8192	
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	

### 12.2. Persistence and degradability

No information available.

### 12.3. Bioaccumulative potential

No information available.

### BCF

CAS No	Chemical name	BCF	Species	Source
7664-39-3	Hydrofluoric acid %	53 - 58	not specified	REACh Registration D

### 12.4. Mobility in soil

No information available.

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

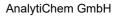
No information available.

### **Further information**

Avoid release to the environment. Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

### **SECTION 13: Disposal considerations**

### 13.1. Waste treatment methods





according to Regulation (EC) No 1907/2006

### Multielement-Standard 6 Elemente je 100 mg/lin Flusssäure 1 %

Revision date: 15.04.2024

Product code: 34738

Page 12 of 14

#### **Disposal recommendations**

Send to a physico-chemical treatment facility under observation of official regulations. Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste. Do not allow to enter into surface water or drains.

### Contaminated packaging

This material and its container must be disposed of as hazardous waste. 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 1790
14.2. UN proper shipping name:	Hydrofluoric acid
14.3. Transport hazard class(es):	8
14.4. Packing group:	II
Hazard label:	8+6.1
Classification code:	CT1
Limited quantity:	1 L
Excepted quantity:	E2
Transport category:	2
Hazard No:	86
Tunnel restriction code:	E
Inland waterways transport (ADN)	
14.1. UN number or ID number:	UN 1790
14.2. UN proper shipping name:	Hydrofluoric acid
14.3. Transport hazard class(es):	8
14.4. Packing group:	II
Hazard label:	8+6.1
Classification code:	CT1
Special Provisions:	802
Limited quantity:	1 L
Excepted quantity:	E2
Marine transport (IMDG)	
14.1. UN number or ID number:	UN 1790
14.2. UN proper shipping name:	Hydrofluoric acid
14.3. Transport hazard class(es):	8
14.4. Packing group:	II
Hazard label:	8+6.1
Special Provisions:	-
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 1790
14.2. UN proper shipping name:	Hydrofluoric acid
14.3. Transport hazard class(es):	8
14.4. Packing group:	II
Hazard label:	8+6.1
Limited quantity Passenger:	0.5 L
Passenger LQ:	Y840
Excepted quantity:	E2



Multielement-Standard 6 Elemente je 100 mg/lin Flusssäure 1 %				
Revision date: 15.04.2024	Product code: 34738	Page 13 of 14		
IATA-packing instructions - Passenger: IATA-max. quantity - Passenger: IATA-packing instructions - Cargo: IATA-max. quantity - Cargo:	851 1 L 855 30 L			
14.5. Environmental hazards				
ENVIRONMENTALLY HAZARDOUS:	No			
<ul> <li><u>14.6. Special precautions for user</u> Warning: Toxic. strongly corrosive.</li> <li><u>14.7. Maritime transport in bulk according to</u> not applicable</li> </ul>	o IMO instruments			
SECTION 15: Regulatory information				
15.1. Safety, health and environmental requ	lations/legislation specific for the substance or mixture			
<b>EU regulatory information</b> Restrictions on use (REACH, annex XVII): Entry 3, Entry 75 Information according to Directive				
2012/18/EU (SEVESO III): Marketing and use of explosives precursors (Regulation (EU) 2019/1148): This product is regulated by Regulation (EU) 2019/1148: all suspicious transactions, and significant disappearances and thefts should be reported to the relevant national contact point.				
National regulatory information				
Employment restrictions:	Observe restrictions to employment for juveniles according to the 'juve work protection guideline' (94/33/EC). Observe employment restriction under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.			
Water hazard class (D):	1 - slightly hazardous to water			
Skin resorption/Sensitization:	Permeates easily through outer skin and causes poisoning.			
<u>15.2. Chemical safety assessment</u> Chemical safety assessments for subs	tances in this mixture were not carried out.			
SECTION 16: Other information				

### **SECTION 16: Other information**

### Abbreviations and acronyms

Ox. Liq: Oxidising liquid Met. Corr: Substance or mixture corrosive to metals Acute Tox: Acute toxicity Skin Corr: Skin corrosion Eye Dam: Eye damage Carc: Carcinogenicity STOT RE: Specific target organ toxicity - repeated exposure 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%



according to Regulation (EC) No 1907/2006

### Multielement-Standard 6 Elemente je 100 mg/lin Flusssäure 1 %

Revision date: 15.04.2024

Product code: 34738

Page 14 of 14

### Classification for mixtures and used evaluation method according to Regulation (EC) No 1272/2008 [CLP]

Classification	Classification procedure
Acute Tox. 3; H311	Calculation method
Acute Tox. 4; H302	Calculation method
Acute Tox. 4; H332	Calculation method
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.				
H300	Fatal if swallowed.				
H302	Harmful if swallowed.				
H302+H332	Harmful if swallowed or if inhaled.				
H310	Fatal in contact with skin.				
H311	Toxic in contact with skin.				
H314	Causes severe skin burns and eye damage.				
H318	Causes serious eye damage.				
H330	Fatal if inhaled.				
H331	Toxic if inhaled.				
H332	Harmful if inhaled.				
EUH071	Corrosive to the respiratory tract.				

#### **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.

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