

## Multielement-Standardlösung 23 Elemente in Salpetersäure 1 mol/l

Revision date: 30.01.2023

Product code: 28768

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

### 1.1. Product identifier

Multielement-Standardlösung 23 Elemente in Salpetersäure 1 mol/l

UFI:

#### UVNJ-Q258-K00T-HWD6

## 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	
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 Danger	ous Goods] Incidents Spill, Leak, Fire,
number:	Exposure, or Accident Call CHEMT	REC Day or Night Within USA and Canada:
	1-800-424-9300 Outside USA and 0	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 Skin Sens. 1; H317 Aquatic Chronic 3; H412

Full text of hazard statements: see SECTION 16.

## 2.2. Label elements

## **GB CLP Regulation**

## Hazard components for labelling

nitric acid Signal word:

Danger

### **Pictograms:**





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#### Hazard statements

H290	May be corrosive to metals.	
H314	Causes severe skin burns and eye damage.	
H317	May cause an allergic skin reaction.	
H412	Harmful to aquatic life with long lasting effects.	
ecautionary sta	rements	

### **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

Corrosive to the respiratory tract.

## 2.3. Other hazards

EUH071

No information available.

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

## 3.2. Mixtures

## **Chemical characterization**

Mixtures in aqueous solution

## Hazardous components

CAS No	Chemical name					
	EC No	Index No	REACH No			
	Classification (GB CLP Regulatio	n)				
7697-37-2	nitric acid			5 - < 10 %		
	231-714-2	007-030-00-3	01-2119487297-23			
	Ox. Liq. 3, Met. Corr. 1, Acute To	x. 3, Skin Corr. 1A; H272 H2	90 H331 H314 EUH071			
7440-66-6	zinc			< 1 %		
	231-175-3					
	Aquatic Acute 1, Aquatic Chronic	1; H400 H410				
13138-45-9	nickel dinitrate	< 0.1 %				
	236-068-5	028-012-00-1				
	Ox. Sol. 2, Carc. 1A, Muta. 2, Rej Resp. Sens. 1, Skin Sens. 1, STC H360D H332 H302 H315 H318 H	quatic Chronic 1; H272 H350i H341				
7761-88-8	silver nitrate	< 0.1 %				
	231-853-9	047-001-00-2	01-2119513705-43			
	Ox. Sol. 2, Met. Corr. 1, Skin Cor H290 H314 H318 H400 H410					

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



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

CAS No	EC No	Chemical name	Quantity			
	Specific Conc.	Limits, M-factors and ATE				
7697-37-2	2 231-714-2 nitric acid					
		E 2,65 mg/l (vapours) Ox. Liq. 3; H272: >= 65 - 100 Skin Corr. 1A; H314: >= 20 orr. 1B; H314: >= 5 - < 20				
13138-45-9	236-068-5	nickel dinitrate	< 0.1 %			
	361,9 mg/kg S					
7761-88-8	231-853-9	silver nitrate	< 0.1 %			
	dermal: LD50 = > 348 mg/kg; oral: LD50 = > 2000 mg/kg Aquatic Acute 1; H400: M=1000 Aquatic Chronic 1; H410: M=100					

### **Further Information**

This product does not contain substances of very high concern according to Regulation (EC) No 1907/2006 (REACH), Article 57 above the respective regulatory concentration limit of = 0.1 % (w/w).

## **SECTION 4: First aid measures**

## 4.1. Description of first aid measures

#### General information

First aider: Pay attention to self-protection!

## After inhalation

Provide fresh air.

Call a physician immediately.

### After contact with skin

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

## After contact with eyes

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.

Remove contact lenses, if present and easy to do. Continue rinsing.

Protect uninjured eye.

#### After ingestion

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

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

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

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

No data available





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### **SECTION 5: Firefighting measures**

## 5.1. Extinguishing media

## Suitable extinguishing media

Co-ordinate fire-fighting measures to the fire surroundings.

### Unsuitable extinguishing media

no restriction

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

Non-combustible liquids Hazardous combustion products In case of fire may be liberated: Nitrogen oxides (NOx)

### 5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus. In case of fire and/or explosion do not breathe fumes. Avoid contact with skin, eyes and clothes.

#### Additional information

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water. Move undamaged containers from immediate hazard area if it can be done safely. Use water spray jet to protect personnel and to cool endangered containers.

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

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

### General advice

Corrosive to metals.

### For non-emergency personnel

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

#### For emergency responders

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

### 6.2. Environmental precautions

Do not allow to enter into surface water or drains.

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

#### For containment

Cover drains.

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

Collect in closed and suitable containers for disposal.

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

### For cleaning up

Clean contaminated articles and floor according to the environmental legislation.

#### Other information

Provide adequate ventilation. Do not breathe dust/fume/gas/mist/vapours/spray. Wear breathing apparatus if exposed to vapours/dusts/aerosols.



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## 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. When using do not eat, drink, smoke, sniff. Handle and open container with care. Use personal protection equipment. Provide adequate ventilation. Do not breathe vapour/aerosol. 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

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/m³	fibres/ml	Category	Origin
7697-37-2	Nitric acid	1	2.6		STEL (15 min)	WEL



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## **DNEL/DMEL** values

CAS No	Substance						
DNEL type		Exposure route	Effect	Value			
13138-45-9	nickel dinitrate						
Consumer DI	NEL, acute	oral	systemic	0,012 mg/kg bw/day			
Consumer DI	NEL, long-term	oral	systemic	0,02 mg/kg bw/day			
Worker DNEI	_, acute	inhalation	systemic	104 mg/m <sup>3</sup>			
Worker DNEI	_, acute	inhalation	local	1,6 mg/m³			
Consumer DI	NEL, acute	inhalation	systemic	8,8 mg/m³			
Consumer DI	NEL, acute	inhalation	local	0,1 mg/m³			
7761-88-8	silver nitrate						
Consumer DNEL, long-term		oral	systemic	0,02 mg/kg bw/day			
Worker DNEI	_, long-term	inhalation	systemic	0,016 mg/m <sup>3</sup>			
Consumer DI	NEL, long-term	inhalation	systemic	0,006 mg/m³			

## **PNEC** values

CAS No	Substance						
Environmen	tal compartment	Value					
13138-45-9	38-45-9 nickel dinitrate						
Freshwater		0,0071 mg/l					
Freshwater	(intermittent releases)	0 mg/l					
Marine wate	r	0,0086 mg/l					
Freshwater	sediment	109 mg/kg					
Marine sedir	nent	109 mg/kg					
Secondary poisoning 0,							
Micro-organ	isms 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 wate	r	0,00086 mg/l					
Freshwater sediment		438,13 mg/kg					
Marine sedir	438,13 mg/kg						
Micro-organ	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 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.



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### 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.

## Skin protection

Wear suitable protective clothing. Take off immediately all contaminated clothing. Wash hands before breaks and after work.

#### **Respiratory protection**

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

## 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

<u>9.1. IIII</u>	Simation on basic physical and cher	incal properties	
Phy	sical state:	Liquid	
Colo	bur:	blue	
Odo	ur:	like: Nitric acid	
Odo	ur threshold:	No data available	
Melt	ing point/freezing point:		No data available
Boili	ng point or initial boiling point and		No data available
boili	ng range:		
Flan	nmability:		No data available
Low	er explosion limits:		No data available
Upp	er explosion limits:		No data available
Flas	h point:		Х
Auto	p-ignition temperature:		No data available
Dec	omposition temperature:		No data available
pH-\	/alue:		0
Visc	osity / kinematic:		No data available
Solu	ibility in other solvents		
1	not determined		
Diss	olution rate:		No data available
Part	ition coefficient n-octanol/water:		No data available
Disp	persion stability:		No data available
Vap	our pressure:		No data available
•	our pressure:		No data available
Den	-		No data available
	ative density:		No data available
	a density:		No data available
	ative vapour density:		No data available
Part	icle characteristics:		No data available
<u>9.2. Oth</u>	ner information		
	rmation with regard to physical haza	ard classes	
•	losive properties		
l	No data available		

Sustaining combustion:

Self-ignition temperature



#### Multielement-Standardlösung 23 Elemente in Salpetersäure 1 mol/l Revision date: 30.01.2023 Product code: 28768 Page 8 of 14 Solid: not applicable Gas: not applicable Oxidizing properties Oxidising agent Other safety characteristics No data available Evaporation rate: 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: 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** 

## Further information

No data available

## **SECTION 11: Toxicological information**

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

## Acute toxicity

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



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CAS No	Chemical name	Chemical name						
	Exposure route	Dose		Species	Source	Method		
7697-37-2	nitric acid							
	inhalation vapour	ATE 2,6	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

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

May cause an allergic skin reaction. (nickel dinitrate)

### 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.

# 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.



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## **SECTION 12: Ecological information**

## 12.1. Toxicity

Harmful to aquatic life with long lasting effects.



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CAS No	Chemical name								
OAO NO	Aquatic toxicity	Dose		[h]   [d]	Species	Source	Method		
7697-37-2	nitric acid	2000		[] [ []	opolico		motriou		
	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 m	> 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		



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Crustacea toxicity	NOEC 0,00031 mg/l	20 d Isonychia bicolour	Environmental Toxicology and Chemistry.	20 day sublethal effects on representati	

## 12.2. Persistence and degradability

The product has not been tested.

### 12.3. Bioaccumulative potential

The product has not been tested.

### 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

The product has not been tested.

## 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

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. Discharge into the environment must be avoided.

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

## 13.1. Waste treatment methods

#### Disposal recommendations

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

### Contaminated packaging

Handle contaminated packages in the same way as the substance itself. The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

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

### **SECTION 14: Transport information**

### Land transport (ADR/RID)

14.1. UN number or ID number:	UN 2031
14.2. UN proper shipping name:	NITRIC ACID
14.3. Transport hazard class(es):	8
14.4. Packing group:	II
Hazard label:	8
Classification code:	C1
Limited quantity:	1 L
Excepted quantity:	E2
Transport category:	2
Hazard No:	80



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Tunnel restriction code:	Е			
Inland waterways transport (ADN)				
14.1. UN number or ID number:	UN 2031			
14.2. UN proper shipping name:	NITRIC ACID			
14.3. Transport hazard class(es):	8			
14.4. Packing group:	II			
Hazard label:	8			
Classification code:	C1			
Limited quantity:	1 L			
Excepted quantity:	E2			
Marine transport (IMDG)				
<u>14.1. UN number or ID number:</u>	UN 2031			
14.2. UN proper shipping name:	NITRIC ACID			
14.3. Transport hazard class(es):	8			
14.4. Packing group:				
Hazard label:	8			
Special Provisions:	-			
Limited quantity: Excepted quantity:	1 L E2			
EmS:	F-A, S-B			
Air transport (ICAO-TI/IATA-DGR)	1 / (, 0 D			
<u>14.1. UN number or ID number:</u>	UN 2031			
14.1. UN proper shipping name:	NITRIC ACID			
14.3. Transport hazard class(es):	8			
14.4. Packing group:	0			
Hazard label:	8			
Special Provisions:	A212			
Limited quantity Passenger:	Forbidden			
Passenger LQ:	Forbidden			
Excepted quantity:	E0			
IATA-packing instructions - Passenger:		Forbidden		
IATA-max. quantity - Passenger:		Forbidden		
IATA-packing instructions - Cargo:		855		
IATA-max. quantity - Cargo:		30 L		
14.5. Environmental hazards				
ENVIRONMENTALLY HAZARDOUS:	No			
14.6. Special precautions for user Warning: strongly corrosive.				
14.7. Maritime transport in bulk according t	o IMO instruments			
not applicable	e intermettamento			
SECTION 15: Regulatory information				
15.1. Safety, health and environmental regu	lations/legislation sp	pecific 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:		s to employment for juveniles according to the 'juvenile		
Water hazard class (D):	work protection gui 3 - highly hazardou	, ,		



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Skin resorption/Sensitization:

Causes allergic hypersensitivity reactions.

#### 15.2. Chemical safety assessment

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

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

#### Changes

This data sheet contains changes from the previous version in section(s): 2,4,5,7,8,9,10,11,12,13,14,15.

#### Abbreviations and acronyms

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%

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

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	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.
	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.
	H412	Harmful to aquatic life with long lasting effects.
	EUH071	Corrosive to the respiratory tract.

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