



Revision date: 29.05.2024

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Zinkphosphat-Konversions-Angriffs-Lösung Product code: 32311

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

1.1. Product identifier

Zinkphosphat-Konversions-Angriffs-Lösung

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

Use of the substance/mixture

Laboratory chemicals

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

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

Uses advised against

Do not use for private purposes (household).

1.3. Details of the supplier of the safety data sheet

Company name:	AnalytiChem GmbH ACD	
Street: Place:	Stempelstraße 6 D-47167 Duisburg	
Telephone: E-mail:	0203/5194-0 info@analytichem.de	Telefax: 0203/5194-290
Contact person: E-mail: Internet: Responsible Department:	Abteilung Produktsicherheit produktsicherheit@analytichem.de www.analytichem.de Abteilung Produktsicherheit	Telephone: 0203/5194-107/117
<u>1.4. Emergency telephone</u> number:	Exposure, or Accident Call CHEMTR	ous Goods] Incidents Spill, Leak, Fire, REC Day or Night Within USA and Canada: canada: +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 Met. Corr. 1; H290 Skin Corr. 1A; 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
sodium hydroxide

Signal word:

Pictograms:



Danger

Hazard statements

H290 H314

May be corrosive to metals. Causes severe skin burns and eye damage.



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Precautionary statements

P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing 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.

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

Mixtures in aqueous solution

Relevant ingredients

CAS No	Chemical name	Chemical name					
	EC No	Index No	REACH No				
	Classification (Regulation	Classification (Regulation (EC) No 1272/2008)					
1310-73-2	sodium hydroxide						
	215-185-5	011-002-00-6	01-2119457892-27				
	Met. Corr. 1, Skin Corr. 1A; H290 H314						
6381-92-6	EDTA Na 2			5 - < 10 %			
	205-358-3		01-2119486775-20				
	Acute Tox. 4, STOT RE 2; H332 H373						

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

Specific Co	nc. Limits, M-f	actors and ATE	
CAS No	EC No	Chemical name	Quantity
	Specific Con	c. Limits, M-factors and ATE	
1310-73-2	215-185-5	sodium hydroxide	5 - < 10 %
		A; H314: >= 5 - 100 Skin Corr. 1B; H314: >= 2 - < 5 Skin Irrit. 2; H315: >= 0,5 - < 2; H319: >= 0,5 - < 2	
6381-92-6	205-358-3	EDTA Na 2	5 - < 10 %
	inhalation: A 2800 mg/kg	TE = 11 mg/l (vapours); inhalation: ATE = 1,5 mg/l (dusts or mists); oral: LD50 =	

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.



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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.

After ingestion

Rinse mouth immediately and drink plenty of water. Do NOT induce vomiting. Adverse human health effects and symptoms: Gastric perforation. Call a physician immediately. Do not allow a neutralisation agent to be drunk.

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

Skin corrosion/irritation Dyspnoea Cough Circulatory collapse

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

No data available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

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

Unsuitable extinguishing media

no restriction

5.2. Special hazards arising from the substance or mixture

Non-flammable.

5.3. Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing. Avoid contact with skin, eyes and clothes.

Additional information

Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

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



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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

Do not breathe vapour/aerosol. Read label before use.

Advice on protection against fire and explosion

No special fire protection measures are necessary.

Advice on general occupational hygiene

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

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

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Provide adequate ventilation as well as local exhaustion at critical locations. Unsuitable container/equipment material: Metal

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



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Occupational exposure limits

CAS No	Substance	ppm	mg/m³	fib/cm³	Category	Origin
1310-73-2	Sodium hydroxide	-	2		STEL (15 min)	
102-71-6	Triethanolamine	-	5		TWA (8 h)	

DNEL/DMEL values

CAS No	Substance			
DNEL type		Exposure route	Effect	Value
1310-73-2	sodium hydroxide			
Worker DNEL	, long-term	inhalation	local	1 mg/m ³
Consumer DN	EL, long-term	inhalation	local	1 mg/m³
6381-92-6	EDTA Na 2			
Worker DNEL	long-term	inhalation	local	1,5 mg/m³
Worker DNEL	, acute	inhalation	local	3 mg/m³
Consumer DN	EL, long-term	inhalation	local	0,6 mg/m³
Consumer DN	EL, acute	inhalation	local	1,2 mg/m³
Consumer DN	EL, long-term	oral	systemic	25 mg/kg bw/day
102-71-6	Triethanolamine			
Consumer DN	EL, long-term	inhalation	local	1,25 mg/m³
Worker DNEL	, long-term	inhalation	systemic	5 mg/m³
Worker DNEL	, long-term	inhalation	local	5 mg/m³
Worker DNEL	, long-term	dermal	systemic	6,3 mg/kg bw/day
Consumer DN	EL, long-term	inhalation	systemic	1,25 mg/m³
Consumer DN	EL, long-term	dermal	systemic	3,1 mg/kg bw/day
Consumer DN	EL, long-term	oral	systemic	13 mg/kg bw/day
PNEC values	3			
CAS No	Substance			
Environmental	compartment			Value
6381-92-6	EDTA Na 2			
Freshwater				2,2 mg/l
Freshwater (in	termittent releases)			1,2 mg/l
Marine water				0,22 mg/l

Freshwater (intermittent releases)

102-71-6

Freshwater

Marine water

Freshwater sediment

Marine sediment

Soil

Micro-organisms in sewage treatment plants (STP)

Micro-organisms in sewage treatment plants (STP)

Triethanolamine

43 mg/l

0,32 mg/l

5,12 mg/l

0,032 mg/l

1,7 mg/kg

0,17 mg/kg

0,151 mg/kg

10 mg/l



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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.

Do not breathe gas/fumes/vapour/spray.

Individual protection measures, such as personal protective equipment

Eye/face protection

Suitable eye protection: goggles.

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 730 Camatril® Velours Recommended material: NBR (Nitrile rubber) 0,4 mm Wearing time with permanent contact: > 480 min

By short-term hand contact

Recommended glove articles: KCL 730 Camatril® Velours Recommended material: NBR (Nitrile rubber) 0,4 mm Wearing time with occasional contact (splashes): > 480 min

The breakthrough times stated above were determined by KCL in laboratory tests acc. to EN374 with samples of the recommended glove types. This recommendation applies only to the product stated in the safety data sheet<(>,<)> supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).

Skin protection

Wear suitable protective clothing.

Respiratory protection

In case of inadequate ventilation wear respiratory protection.

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.

Environmental exposure controls

Do not allow to enter into surface water or drains.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	Liquid	
Colour:	clear	
Odour:	odourless	
Melting point/freezing point:		No data available
Boiling point or initial boiling point	and	No data available
boiling range:		
Flammability:		not applicable
Lower explosion limits:		not determined
Upper explosion limits:		not determined
Flash point:		Х
Auto-ignition temperature:		No data available
Decomposition temperature:		not determined
pH-Value:		alkaline



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Viscosity / kinematic:	No data available	
Solubility in other solvents		
not determined		
Partition coefficient n-octanol/water:	not determined	
Vapour pressure:	No data available	
Vapour pressure:	No data available	
Density (at 20 °C):	1,1291 g/cm³	
Bulk density:	No data available	
Relative vapour density:	not determined	
9.2. Other information		
Information with regard to physical hazard clas	sses	
Sustaining combustion:	No data available	
Self-ignition temperature		
Solid:	not applicable	
	not applicable	
- · ·		
Not oxidising.		
Other safety characteristics		
Evaporation rate:	not determined	
Solvent separation test:	not determined	
Solvent content:	not determined	
Solid content:	not determined	
Sublimation point:	No data available	
Softening point:	No data available	
Pour point:	No data available	
Viscosity / dynamic:	No data available	
Flow time:	No data available	
Further Information		
Self-ignition temperature Solid: Gas: Oxidizing properties Not oxidising. Other safety characteristics Evaporation rate: Solvent separation test: Solvent content: Solid content: Solid content: Sublimation point: Softening point: Pour point: Viscosity / dynamic: Flow time:	not applicable not applicable not determined not determined not determined not determined No data available No data available No data available No data available	

not determined

SECTION 10: Stability and reactivity

10.1. Reactivity

Corrosive to metals.

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

Alkali metals Ammonia (NH3) Metal Acid

10.4. Conditions to avoid

none

10.5. Incompatible materials

Aluminium Brass Glass Keep away from: Metal. The product develops hydrogen in an aqueous solution in contact with metals.

10.6. Hazardous decomposition products

No known hazardous decomposition products.

Further information

No data available



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SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

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

ATEmix calculated

ATE (oral) > 2000 mg/kg; ATE (dermal) > 2000 mg/kg; ATE (inhalation vapour) > 20 mg/l; ATE (inhalation dust/mist) > 5 mg/l

CAS No	Chemical name								
	Exposure route	Dose		Species	Source	Method			
6381-92-6	EDTA Na 2	EDTA Na 2							
	oral	LD50 mg/kg	2800	Rat	Study report (1973)	BASF-TEST: In principle, the methods des			
	inhalation vapour	ATE	11 mg/l						
	inhalation dust/mist	ATE	1,5 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.

Practical experience

No data available

11.2. Information on other hazards

Other information

No data available

Further information

Adverse human health effects and symptoms: Gastric perforation.

SECTION 12: Ecological information

12.1. Toxicity

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



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CAS No	Chemical name								
	Aquatic toxicity	Dose		[h] [d]	Species	Source	Method		
1310-73-2	sodium hydroxide			_	_	_			
	Acute crustacea toxicity	EC50 mg/l	40,4	48 h	Ceriodaphnia sp.	Ecotoxicology and Environmental Safety,4	other: acute 48-h immobilization test ac		
6381-92-6	EDTA Na 2	EDTA Na 2							
	Acute fish toxicity	LC50	41 mg/l	96 h	Lepomis macrochirus	Bull. Environm. Contam. Toxicol. 24: 543	The static water acute toxicity tests fo		
	Acute algae toxicity	ErC50 mg/l	> 100	72 h	Pseudokirchneriella subcapitata	Study report (2001)	OECD Guideline 201		
	Acute crustacea toxicity	EC50	140 mg/l	48 h	Daphnia magna	Study report (1989)	other: DIN 38412, part 11		
	Fish toxicity	NOEC mg/l	>= 25,7	35 d	Danio rerio	Study report (2001)	OECD Guideline 210		
	Crustacea toxicity	NOEC	25 mg/l	21 d	Daphnia magna	Study report (1998)	other: EEC Guideline XI/681/86, Draft 4:		

12.2. Persistence and degradability

The product has not been tested.

12.3. Bioaccumulative potential

The product has not been tested.

Partition coefficient n-octanol/water

 Chemical name EDTA Na 2	Log Pow
	-4,3

BCF

CAS No	Chemical name	BCF	Species	Source
6381-92-6	EDTA Na 2	ca. 1,8	Lepomis macrochirus	Proc. 3rd. Ann. Symp

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 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.

Further information

Do not allow to enter into surface water or drains.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Do not allow to enter into surface water or drains. Dispose of waste according to applicable legislation. Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste.



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Contaminated packaging

Wash with plenty of water. Completely emptied packages can be recycled.

SECTION 14: Transport information

Land transport (ADR/RID)	
<u>14.1. UN number or ID number:</u>	UN 1824
14.2. UN proper shipping name:	SODIUM HYDROXIDE SOLUTION
14.3. Transport hazard class(es):	8
14.4. Packing group:	II
Hazard label:	8
Classification code:	C5
Limited quantity:	1 L
Excepted quantity:	E2
Transport category:	2
Hazard No:	80
Tunnel restriction code:	F
Inland waterways transport (ADN)	E
	LIN 1994
14.1. UN number or ID number:	
14.2. UN proper shipping name:	SODIUM HYDROXIDE SOLUTION
14.3. Transport hazard class(es):	8
14.4. Packing group:	II
Hazard label:	8
Classification code:	C5
Limited quantity:	1 L
Excepted quantity:	E2
Marine transport (IMDG)	
<u>14.1. UN number or ID number:</u>	UN 1824
14.2. UN proper shipping name:	SODIUM HYDROXIDE, SOLUTION
14.3. Transport hazard class(es):	8
14.4. Packing group:	II
Hazard label:	8
Special Provisions:	-
Limited quantity:	1 L
Excepted quantity:	E2
EmS:	F-A, S-B
	г-А, 3-В
Air transport (ICAO-TI/IATA-DGR)	
14.1. UN number or ID number:	
14.2. UN proper shipping name:	SODIUM HYDROXIDE, SOLUTION
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:	Νο
<u>14.6. Special precautions for user</u>	



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Warning: strongly corrosive.

14.7. Maritime transport in bulk according to IMO instruments

not applicable

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 75

National regulatory information

Employment restrictions:

Water hazard class (D):

Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC). 2 - obviously hazardous to water

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): 9,12.

Abbreviations and acronyms

Met. Corr: Substance or mixture corrosive to metals Acute Tox: Acute toxicity Skin Corr: Skin corrosion Eye Dam: Eye damage 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%

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. 1A; H314	Calculation method
Eye Dam. 1; H318	Calculation method

Relevant H and EUH statements (number and full text)

H290	May be corrosive to metals.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H332	Harmful if inhaled.
H373	May cause damage to organs through prolonged or repeated exposure.

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



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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.

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.)