

Reagenzlösung für de	en Ammonium-Analyzer 150 g Wasser	Na2-EDTA x 2 H2O + 40 g NaOH / I	in
Revision date: 10.11.2022	Product code: 342	31	Page 1 of 12
SECTION 1: Identification of the	substance/mixture and of the con	npany/undertaking	
<u>1.1. Product identifier</u> Reagenzlösung für den Ammo	nium-Analyzer 150 g Na2-EDTA x 2 H	2O + 40 g NaOH / I in Wasser	
UFI:	CWS1-Q3UX-U00C-7UTN		
1.2. Relevant identified uses of the s	ubstance or mixture and uses advise	ed against	
	nces as such or in preparations at indu ain (administration, education, entertain		
Uses advised against Do not use for private purposes	s (household).		
1.3. Details of the supplier of the saf	<u>ety data sheet</u>		
Company name: Street: Place:	Fa. Bernd Kraft GmbH Stempelstraße 6 D-47167 Duisburg		
Telephone: e-mail:	0203/5194-0 info@berndkraft.de	Telefax: 0203/5194-290	
Contact person: e-mail: Internet: Responsible Department:	Abteilung Produktsicherheit produktsicherheit@berndkraft.de www.berndkraft.de Abteilung Produktsicherheit	Telephone: 0203/5194-107/117	
<u>1.4. Emergency telephone</u> number:	Exposure, or Accident Call CHEMT	rous Goods] Incidents Spill, Leak, Fire, REC Day or Night Within USA and Canada Canada: +1 703-741-5970 (collect calls	
Further Information inapplicable, this product is a n	nixture REACH registration number see	e 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 STOT RE 2; H373

Full text of hazard statements: see SECTION 16.

Danger

# 2.2. Label elements

# **GB CLP Regulation**

# Hazard components for labelling

EDTA Na 2 sodium hydroxide

Signal word:

Pictograms:





R

according to UK REACH Regulation

# Reagenzlösung für den Ammonium-Analyzer 150 g Na2-EDTA x 2 H2O + 40 g NaOH / I in

### Wasse

	wasser	
Revision date: 10.11.2022	Product code: 34231	Page 2 of 12
Hazard statements		
H290	May be corrosive to metals.	
H314	Causes severe skin burns and eye damage.	
H373	May cause damage to organs (respiratory system) through prolonged or repeated exposure if inhaled.	
Precautionary statemen	its	
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.

Immediately call a POISON CENTER/doctor.

P310

# 2.3. Other hazards

No information available.

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

# 3.2. Mixtures

Chemical characterization Mixtures in aqueous solution

### Hazardous components

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

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	
6381-92-6	205-358-3	EDTA Na 2	10 - < 15 %
	inhalation: ATE 2800 mg/kg	= 11 mg/l (vapours); inhalation: ATE = 1,5 mg/l (dusts or mists); oral: LD50 =	
1310-73-2	215-185-5	sodium hydroxide	1 - < 5 %
	· · · · ·	- 1314: >= 5 - 100 Skin Corr. 1B; H314: >= 2 - < 5 Skin Irrit. 2; H315: >= 0,5 - < H319: >= 0,5 - < 2	

# 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



# Reagenzlösung für den Ammonium-Analyzer 150 g Na2-EDTA x 2 H2O + 40 g NaOH / I in

### Wasser

Revision date: 10.11.2022

Product code: 34231

Page 3 of 12

#### **General information**

First aider: Pay attention to self-protection!

### After inhalation

Provide fresh air. Call a doctor if you feel unwell.

#### 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.

### 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

Skin corrosion/irritation

# 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-combustible liquids

### 5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus. 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.



# Reagenzlösung für den Ammonium-Analyzer 150 g Na2-EDTA x 2 H2O + 40 g NaOH / I in Wasser Revision date: 10.11.2022 Product code: 34231 Page 4 of 12 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

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 Aluminium Tin Zinc

### Hints on joint storage

national regulations

# Further information on storage conditions

Keep container tightly closed.



# Reagenzlösung für den Ammonium-Analyzer 150 g Na2-EDTA x 2 H2O + 40 g NaOH / I in

# Wasser

Revision date: 10.11.2022

Product code: 34231

Page 5 of 12

# 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
1310-73-2	Sodium hydroxide	-	2		STEL (15 min)	WEL

# DNEL/DMEL values

	Exposure route	Effect	Value		
EDTA Na 2					
ong-term	inhalation	local	1,5 mg/m³		
cute	inhalation	local	3 mg/m³		
., long-term	inhalation	local	0,6 mg/m³		
., acute	inhalation	local	1,2 mg/m³		
., long-term	oral	systemic	25 mg/kg bw/day		
sodium hydroxide					
Worker DNEL, long-term inhalation local 1 mg/m <sup>3</sup>					
., long-term	inhalation	local	1 mg/m³		
	EDTA Na 2 ng-term cute , long-term , acute , long-term odium hydroxide ng-term	DTA Na 2 ng-term inhalation sute inhalation , long-term inhalation , acute inhalation , long-term oral odium hydroxide ng-term inhalation	DTA Na 2 ng-term inhalation local cute inhalation local , long-term inhalation local , acute inhalation local , acute oral systemic odium hydroxide ng-term inhalation local		

### **PNEC** values

CAS No	Substance				
Environmental compartment Value					
6381-92-6 EDTA Na 2					
Freshwater 2,2 mg/l					
Freshwater (intermittent releases) 1,2 mg/l					
Marine water 0,22 mg/l					
Micro-organism	Micro-organisms in sewage treatment plants (STP) 43 mg/l				

# 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.

Do not breathe vapour/aerosol.

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

### Eye/face protection

Suitable eye protection: goggles.

# 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.



# Reagenzlösung für den Ammonium-Analyzer 150 g Na2-EDTA x 2 H2O + 40 g NaOH / I in

### Wasser

Revision date: 10.11.2022

Product code: 34231

Page 6 of 12

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

By long-term hand contact Trade name/designation: KCL 741 Dermatril® L Recommended material: NBR (Nitrile rubber) 0,11 mm Wearing time with permanent contact: > 480 min

By short-term hand contact Trade name/designation: KCL 741 Dermatril® L Recommended material: NBR (Nitrile rubber) 0,11 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**

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:	odourless	
Odour threshold:	No data available	
Melting point/freezing point:		No data available
Boiling point or initial boiling point and		No data available
boiling range:		
Flammability		
Solid/liquid:		not applicable
Gas:		not applicable
Lower explosion limits:		not applicable
Upper explosion limits:		not applicable
Flash point:		Х
Auto-ignition temperature:		No data available
Decomposition temperature:		No data available
pH-Value:		13,5
Viscosity / kinematic:		No data available
Water solubility:		very soluble
Solubility in other solvents		
not determined		



# Reagenzlösung für den Ammonium-Analyzer 150 g Na2-EDTA x 2 H2O + 40 g NaOH / I in

Reagenziosung für den Ammor	Wasser	
Revision date: 10.11.2022	Product code: 34231	Page 7 of 12
Dissolution rate:	No data available	
Partition coefficient n-octanol/water:	No data available	
Dispersion stability:	No data available	
Vapour pressure:	No data available	
Vapour pressure:	No data available	
Density (at 20 °C):	1,0923 g/cm³	
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 cl	asses	
Explosive properties		
not applicable		
Sustaining combustion:	No data available	
Self-ignition temperature		
Solid:	not applicable	
Gas:	not applicable	
Oxidizing properties		
Not oxidising.		
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	
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.

# 10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

# 10.3. Possibility of hazardous reactions

No data available

### 10.4. Conditions to avoid No data available

# 10.5. Incompatible materials

Metal

# 10.6. Hazardous decomposition products

No known hazardous decomposition products.

# **Further information**

No data available



# Reagenzlösung für den Ammonium-Analyzer 150 g Na2-EDTA x 2 H2O + 40 g NaOH / I in

### Wasser

Revision date: 10.11.2022

Product code: 34231

Page 8 of 12

# **SECTION 11: Toxicological information**

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

# Toxicocinetics, 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 (inhalation vapour) 80,88 mg/l; ATE (inhalation dust/mist) 11,029 mg/l

CAS No	Chemical name	Chemical name						
	Exposure route	Dose		Species	Source	Method		
6381-92-6	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

Causes severe skin burns and eye damage.

Causes serious eye damage.

### Sensitising effects

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

### 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

May cause damage to organs through prolonged or repeated exposure. (EDTA Na 2)

#### 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

Skin corrosion/irritation



# Reagenzlösung für den Ammonium-Analyzer 150 g Na2-EDTA x 2 H2O + 40 g NaOH / I in

# Wasser

Revision date: 10.11.2022

Product code: 34231

Page 9 of 12

# **SECTION 12: Ecological information**

### 12.1. Toxicity

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

CAS No	Chemical name							
	Aquatic toxicity	Dose		[h]   [d]	Species	Source	Method	
6381-92-6	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:	
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	

# 12.2. Persistence and degradability

The methods for determining the biological degradability are not applicable to inorganic substances.

# 12.3. Bioaccumulative potential

not applicable

### Partition coefficient n-octanol/water

CAS No	Chemical name		Log Pow
6381-92-6	EDTA Na 2		-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

There are no data available on the preparation/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.

# Further information

Do not allow to enter into surface water or drains.

# **SECTION 13: Disposal considerations**

### 13.1. Waste treatment methods



# Reagenzlösung für den Ammonium-Analyzer 150 g Na2-EDTA x 2 H2O + 40 g NaOH / I in

# Wasser

Revision date: 10.11.2022

Product code: 34231

Page 10 of 12

# **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

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)

Land transport (ADK/KID)	
<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:	E
Inland waterways transport (ADN)	
14.1. UN number or ID number:	UN 1824
14.2. UN proper shipping name:	SODIUM HYDROXIDE SOLUTION
<u>14.3. Transport hazard class(es):</u>	8
14.4. Packing group:	II
Hazard label:	8
Classification code:	C5
Limited quantity:	1 L
Excepted quantity:	E2
Marine transport (IMDG)	
14.1. UN number or ID number:	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
Segregation group:	alkalis
Air transport (ICAO-TI/IATA-DGR)	
14.1. UN number or ID number:	UN 1824
14.2. UN proper shipping name:	SODIUM HYDROXIDE, SOLUTION
<u>14.3. Transport hazard class(es):</u>	8
<u>14.4. Packing group:</u>	II
Hazard label:	8
Special Provisions:	A3 A803
Limited quantity Passenger:	0.5 L
Passenger LQ:	Y840
Excepted quantity:	E2



Reagenzlösung für den Ammonium-Analyzer 150 g Na2-EDTA x 2 H2O + 40 g NaOH / I in Wasser				
Revision date: 10.11.2022	Product code: 34231	Page 11 of 12		
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			
14.6. Special precautions for user   Warning: strongly corrosive.   14.7. Maritime transport in bulk according to not applicable	IMO instruments			
SECTION 15: Regulatory information				
15.1. Safety, health and environmental regul	ations/legislation specific for the substance or mixture			
EU regulatory information Restrictions on use (REACH, annex XVII): Entry 3, Entry 75 Information according to 2012/18/EU (SEVESO III):	Not subject to 2012/18/EU (SEVESO III)			
National regulatory information				
Employment restrictions:	Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC).			
Mator bazard class (D):	/ater hazard class (D): 2 - obviously hazardous to water			

# 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%

# 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
STOT RE 2; H373	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 (respiratory system) through prolonged or repeated exposure if inhaled.



# Reagenzlösung für den Ammonium-Analyzer 150 g Na2-EDTA x 2 H2O + 40 g NaOH / I in

### Wasser

Page 12 of 12

Revision date: 10.11.2022

H373

Product code: 34231

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 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.)