

Multielement-Standardlösung "Si_Su_B Hoch" 3 Kationen/Anionen in verdünnter Natronlauge					
Revision date: 19.02.2024	Product code: 29582	2	Page 1 of 1		
SECTION 1: Identification of t	he substance/mixture and of the comp	pany/undertaking			
1.1. Product identifier					
Multielement-Standardlösu	ng "Si_Su_B Hoch" 3 Kationen/Anionen in v	erdünnter Natronlauge			
UFI:	1RWM-Q20D-W00N-YSQQ				
1.2. Relevant identified uses of t	ne substance or mixture and uses advised	l against			
	ostances as such or in preparations at indus omain (administration, education, entertainr				
Uses advised against					
Do not use for private purp	oses (household). No data available				
1.3. Details of the supplier of the	safety data sheet				
Company name:	AnalytiChem GmbH ACD				
Street:	Stempelstraße 6				
Place:	D-47167 Duisburg				
Telephone: E-mail:	0203/5194-0 info@analytichem.de	Telefax: 0203/5194-290			
Contact person:	Abteilung Produktsicherheit	Telephone: 0203/5194-107/117			
E-mail:	produktsicherheit@analytichem.de				
Internet:	www.analytichem.de				
Responsible Department:	Abteilung Produktsicherheit				
<u>1.4. Emergency telephone</u> number:	Exposure, or Accident Call CHEMTR	us Goods] Incidents Spill, Leak, Fire, EC Day or Night Within USA and Canad anada: +1 703-741-5970 (collect calls	a:		
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

Full text of hazard statements: see SECTION 16.

2.2. Label elements

GB CLP Regulation

Signal word:

Pictograms:



Warning

Hazard statements H290

P234

May be corrosive to metals.

Precautionary statements

Keep only in original packaging.



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P390 P406 Absorb spillage to prevent material damage. Store in a corrosion-resistant container with a resistant inner liner.

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 (GB CLP Regu	ulation)				
1310-73-2	sodium hydroxide					
	215-185-5	011-002-00-6	01-2119457892-27			
	Met. Corr. 1, Skin Corr. 1A; H290 H314					
7647-14-5	sodium chloride			< 0.1 %		
	231-598-3		01-2119485491-33			

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

Specific Cor	nc. Limits, M-fac	ctors and ATE		
CAS No	EC No	Chemical name	Quantity	
	Specific Conc.	Limits, M-factors and ATE		
1310-73-2	215-185-5	sodium hydroxide	< 1 %	
	Skin Corr. 1A; H314: >= 5 - 100 Skin Corr. 1B; H314: >= 2 - < 5 Skin Irrit. 2; H315: >= 0,5 - < 2 Eye Irrit. 2; H319: >= 0,5 - < 2			
7647-14-5	231-598-3	sodium chloride	< 0.1 %	
dermal: LD50 = > 10000 mg/kg; oral: LD50 = 3550 mg/kg				

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

No data available

After inhalation

Provide fresh air.

After contact with skin

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

After contact with eyes

Rinse immediately carefully and thoroughly with eye-bath or water.

In case of eye irritation consult an ophthalmologist.

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



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After ingestion

Rinse mouth immediately and drink plenty of water. Call a doctor if you feel unwell.

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

Irritant

<u>4.3. Indication of any immediate medical attention and special treatment needed</u> 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

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.

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

No special environmental measures are necessary.

6.3. Methods and material for containment and cleaning up

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



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Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

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

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

Keep container tightly closed. Unsuitable container/equipment material: Metal Aluminium Tin Zinc

Hints on joint storage

national regulations

Further information on storage conditions

Store in a dry place. storage temperature: +15°C - +25°C.

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



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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/m ³
7647-14-5	sodium chloride			
Consumer DN	EL, long-term	dermal	systemic	126,65 mg/kg bw/day
Consumer DN	EL, acute	dermal	systemic	126,65 mg/kg bw/day
Consumer DN	EL, long-term	oral	systemic	126,65 mg/kg bw/day
Consumer DN	EL, acute	oral	systemic	126,65 mg/kg bw/day
Worker DNEL,	long-term	inhalation	systemic	2068,62 mg/m ³
Worker DNEL,	acute	inhalation	systemic	2068,62 mg/m ³
Worker DNEL,	acute	dermal	systemic	295,52 mg/kg bw/day
Consumer DN	EL, long-term	inhalation	systemic	443,28 mg/m ³
Consumer DN	EL, acute	inhalation	systemic	443,28 mg/m ³
Worker DNEL,	long-term	dermal	systemic	295,52 mg/kg bw/day

PNEC values

CAS No	Substance		
Environmental compartment Value			
7647-14-5	sodium chloride		
Freshwater		5 mg/l	
Micro-organisms in sewage treatment plants (STP)		500 mg/l	
Soil 4,86 mg/k			

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

Wear 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.



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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

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

-	in internation on bacie phycical and one		
	Physical state:	Liquid	
	Colour:	colourless	
	Odour:	odourless	
	Odour threshold:	not determined	
	Melting point/freezing point:		not determined
	Boiling point or initial boiling point and		not determined
	boiling range:		
	Flammability:		not applicable
	Lower explosion limits:		not determined
	Upper explosion limits:		not determined
	Flash point:		Х
	Auto-ignition temperature:		not determined
	Decomposition temperature:		not determined
	pH-Value:		alkaline
	Viscosity / kinematic:		not determined
	Water solubility:		very soluble
	Solubility in other solvents		
	not determined		
	Partition coefficient n-octanol/water:		not determined
	Vapour pressure:		not determined
	Vapour pressure:		not determined
	Density:		not determined
	Bulk density:		not determined



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Relative vapour density:	not determined			
9.2. Other information				
Information with regard to physical h	nazard classes			
Explosive properties				
not determined				
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:	not determined			
Solvent content:	0			
Solid content:	0			
Sublimation point:	not determined			
Softening point:	not determined			
Pour point:	not determined			
not determined:				
Viscosity / dynamic:	not determined			
Flow time:	not determined			
Further Information				
Corrosive to metals				

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 Aluminium Tin Zinc

10.6. Hazardous decomposition products

No known hazardous decomposition products.

Further information

No data available

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 mixture itself.



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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		
7647-14-5	sodium chloride							
	oral	LD50 mg/kg	3550	Rat		The study methodology followed appeared		
	dermal	LD50 mg/kg	> 10000	Rabbit		The study methology followed appeared to		

Irritation and corrosivity

Based on available data, the classification criteria are not met. slightly irritant but not relevant for classification.

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

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

Aspiration hazard

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

Specific effects in experiment on an animal

There are no data available on the mixture itself.

Additional information on tests

There are no data available on the mixture itself.

Practical experience

There are no data available on the mixture itself.

11.2. Information on other hazards

Other information

There are no data available on the mixture itself.

Further information

There are no data available on the mixture itself.

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
7647-14-5	sodium chloride						
	Acute fish toxicity	LC50 mg/l	5840	96 h	Lepomis macrochirus	Study report (1985)	other: ASTM E729
	Acute crustacea toxicity	EC50 mg/l	4136	48 h	Daphnia magna	J. fish. Res. Bd. Canada, 29: 1691-1700.	OECD Guideline 202
	Fish toxicity	NOEC	252 mg/l	33 d	Pimephales promelas	Study report (1985)	OECD Guideline 210
	Crustacea toxicity	NOEC	314 mg/l	21 d	Daphnia pulex	Memorandum of agreement No. 5429, Kentuc	OECD Guideline 211

12.2. Persistence and degradability

There are no data available on the mixture itself.

12.3. Bioaccumulative potential

There are no data available on the mixture itself.

12.4. Mobility in soil

There are no data available on the mixture itself.

12.5. Results of PBT and vPvB assessment

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

12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

12.7. Other adverse effects

There are no data available on the mixture itself.

Further information

Harmful effect due to pH shift.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste.

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)

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:	III
Hazard label:	8



Safety Data Sheet

according to UK REACH Regulation

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Classification code: Limited quantity: Excepted quantity: Transport category: Hazard No: Tunnel restriction code:	C5 5 L E1 3 80 E			
Inland waterways transport (ADN)	E			
14.1. UN number or ID number: 14.2. UN proper shipping name: 14.3. Transport hazard class(es): 14.4. Packing group: Hazard label:	UN 1824 SODIUM HYDROXIDE SOLUTION 8 III 8			
Classification code: Limited quantity: Excepted quantity:	C5 5 L E1			
Marine transport (IMDG) <u>14.1. UN number or ID number:</u> <u>14.2. UN proper shipping name:</u> <u>14.3. Transport hazard class(es):</u> <u>14.4. Packing group:</u> Hazard label: Special Provisions: Limited quantity: Excepted quantity: EmS: Segregation group:	UN 1824 SODIUM HYDROXIDE SOLUTION 8 III 8 223 5 L E1 F-A, S-B alkalis			
Air transport (ICAO-TI/IATA-DGR) <u>14.1. UN number or ID number:</u> <u>14.2. UN proper shipping name:</u> <u>14.3. Transport hazard class(es):</u> <u>14.4. Packing group:</u> Hazard label:	UN 1824 SODIUM HYDROXIDE SOLUTION 8 III 8			
Special Provisions: Limited quantity Passenger: Passenger LQ: Excepted quantity: IATA-packing instructions - Passenger: IATA-max. quantity - Passenger: IATA-packing instructions - Cargo: IATA-max. quantity - Cargo:	A3 A803 1 L Y841 E1 852 5 L 856 60 L			
14.5. Environmental hazards ENVIRONMENTALLY HAZARDOUS:	No			
 <u>14.6. Special precautions for user</u> Warning: strongly corrosive. <u>14.7. Maritime transport in bulk according to</u> not applicable 	IMO instruments			
SECTION 15: Regulatory information				

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

EU regulatory information



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Restrictions on use (REACH, ann Entry 75 Information according to Directive 2012/18/EU (SEVESO III):		
National regulatory information		
Water hazard class (D):	non-hazardous to water	
SECTION 16: Other information		
Changes This data sheet contains changes from the previous version in section(s): 1,9,12. Abbreviations and acronyms Met. Corr: Corrosive to metals Skin Corr: Skin corrosion 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 us	ed evaluation method according to GB CLP Regulation Classification procedure	
Met. Corr. 1; H290	On basis of test data	
Relevant H and EUH statements H290 May be	e (number and full text) e corrosive to metals. s severe skin burns and eye damage.	I

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. 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.)