

Hydroxylammoniumchlorid-Reduktionslösung zur photometrischen Kupfer-Bestimmung EZ1011-Serie			
Revision date: 11.01.2024	Product code: 33	519	Page 1 of 10
SECTION 1: Identification of the	substance/mixture and of the co	mpany/undertaking	
1.1. Product identifier Hydroxylammoniumchlorid-Re	duktionslösung zur photometrischen	Kunfer-Bestimmung F71011-Serie	
UFI:	PSTY-C2E9-S000-8SWQ		
1.2. Relevant identified uses of the		sed against	
Professional uses: Public dom	ances as such or in preparations at in ain (administration, education, enterta		
Uses advised against			
Do not use for private purpose	Ϋ́Υ,		
<u>1.3. Details of the supplier of the sa</u> Company name:	AnalytiChem GmbH ACD		
Street: Place:	Stempelstraße 6 D-47167 Duisburg		
Telephone:	0203/5194-0	Telefax: 0203/5194-290	
E-mail: Contact person: E-mail: Internet: Responsible Department:	info@analytichem.de Abteilung Produktsicherheit produktsicherheit@analytichem.d www.analytichem.de Abteilung Produktsicherheit	Telephone: 0203/5194-107/117 e	
<u>1.4. Emergency telephone</u> number:	Exposure, or Accident Call CHEM	erous Goods] Incidents Spill, Leak, Fire, TREC Day or Night Within USA and Canada I Canada: +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	on		

2.1. Classification of the substance or mixture

GB CLP Regulation

Skin Irrit. 2; H315 Eye Irrit. 2; H319 Skin Sens. 1; H317 Carc. 2; H351 STOT RE 2; H373

Full text of hazard statements: see SECTION 16.

2.2. Label elements

GB CLP Regulation

Hazard components for labelling hydroxylammonium chloride

Signal word: Warning



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Hazard statements

H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H351	Suspected of causing cancer.
H373	May cause damage to organs through prolonged or repeated exposure.

Precautionary statements

P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing
P302+P352 P362+P364	protection. IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing and wash it before reuse.

2.3. Other hazards

No data available

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

Mixtures in aqueous solution

Relevant ingredients

CAS No	Chemical name		Quantity	
	EC No	Index No	REACH No	
	Classification (GB CLP Regulation)			
5470-11-1	hydroxylammonium chloride		10 - < 15 %	
	226-798-2	612-123-00-2	01-2120766309-45	
	Met. Corr. 1, Carc. 2, Acute Tox. 4, Acute Tox. 4, Skin Irrit. 2, Eye Irrit. 2, Skin Sens. 1, STOT RE 2, Aquatic Acute 1; H290 H351 H312 H302 H315 H319 H317 H373 H400			

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		
5470-11-1	226-798-2	hydroxylammonium chloride	10 - < 15 %
	dermal: ATE =	1100 mg/kg; oral: ATE = 500 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

Self-protection of the first aider



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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

Rinse immediately carefully and thoroughly with eye-bath or water. Remove contact lenses, if present and easy to do. Continue rinsing. Consult an ophthalmologist.

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

Irritant Gastrointestinal complaints Vomiting Spasms Circulatory collapse Narcotic effects Respiratory complaints Allergic reactions Cyanosis (blue coloured blood)

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

Hazardous combustion products In case of fire may be liberated: Nitrogen oxides (NOx) Hydrochloric gas

5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus. Avoid contact with skin, eyes and clothes.

Additional information

Use water spray jet to protect personnel and to cool endangered containers. 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

For non-emergency personnel

Provide adequate ventilation.



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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.

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

Keep container tightly closed. Do not breathe vapour/aerosol. Use extractor hood (laboratory). Avoid contact with skin, eyes and clothes. Read label before use.

Advice on protection against fire and explosion

Usual measures for fire prevention.

Advice on general occupational hygiene

Wash contaminated clothing prior to re-use. Avoid contact with skin, eyes and clothes.

Further information on handling

Wash contaminated clothing before reuse. Wash hands before breaks and after work. Draw up and observe skin protection programme.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed.

Store in a place accessible by authorized persons only.



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Hints on joint storage

national regulations

Further information on storage conditions

Store in a dry place.

7.3. Specific end use(s)

Laboratory chemicals

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.2. Exposure controls

Appropriate engineering controls

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

Individual protection measures, such as personal protective equipment

Eye/face protection

goggles

Hand protection

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. Wash hands before breaks and after work. Draw up and observe skin protection programme.

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

Physical state:	Liquid
Colour:	colourless
Odour:	odourless



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Odour threshold:	No data available	
Melting point/freezing point:	No data availabl	-
Boiling point or initial boiling point and	No data availabl	e
boiling range:		
Flammability:	No data availabl	
Lower explosion limits:	No data availabl	
Upper explosion limits:	No data availabl	e
Flash point:	No data availabl	е
Auto-ignition temperature:	No data availabl	e
Decomposition temperature:	No data availabl	e
pH-Value:	3,	3
Viscosity / kinematic:	No data availabl	e
Water solubility:	No data availabl	e
Solubility in other solvents		
No data available		
Partition coefficient n-octanol/water:	No data availabl	e
Vapour pressure:	No data availabl	e
Vapour pressure:	No data availabl	e
Density:	1,0448 g/cm	1 ³
Bulk density:	No data availabl	е
Relative vapour density:	No data availabl	e
9.2. Other information		
Information with regard to physical haz	zard classes	
Sustaining combustion:	No data availabl	e
Self-ignition temperature		
Solid:	No data availabl	
Gas:	No data availabl	e
Oxidizing properties		
No data available		
Other safety characteristics		
Evaporation rate:	No data availabl	-
Solvent separation test:	No data availabl	
Solvent content:		0
Solid content:		0
Sublimation point:	No data availabl	
Softening point:	No data availabl	
Pour point: No data available:	No data availabl	e
	N	
Viscosity / dynamic:	No data availabl	
Flow time:	No data availabl	e
Further Information		
No data available		
SECTION 10: Stability and reactivity		

10.1. Reactivity

No data available

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions



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Oxidising agent Alkali (lye)

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10.4. Conditions to avoid

No data available

10.5. Incompatible materials

No data available

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

Toxicocinetics, metabolism and distribution

There are no data available on the mixture itself.

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
5470-11-1	hydroxylammonium chlori	de			
		ATE 500 mg/kg			
		ATE 1100 mg/kg			

Irritation and corrosivity

Causes skin irritation.

Causes serious eye irritation.

Sensitising effects

May cause an allergic skin reaction. (hydroxylammonium chloride)

Carcinogenic/mutagenic/toxic effects for reproduction

Suspected of causing cancer. (hydroxylammonium chloride) Germ cell mutagenicity: 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

May cause damage to organs through prolonged or repeated exposure. (hydroxylammonium chloride)

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.



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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 Irritant Gastrointestinal complaints Vomiting Spasms Circulatory collapse Narcotic effects Respiratory complaints Allergic reactions Cyanosis (blue coloured blood)		

SECTION 12: Ecological information

12.1. Toxicity

There are no data available on the mixture itself.

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.

There are no data available on the mixture itself.

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

Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste. Send to a hazardous waste incinerator 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.

Handle contaminated packages in the same way as the substance itself.



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SECTION 14: Transport information

Land transport (ADR/RID)	
14.1. UN number or ID number:	No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name:	No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es):	No dangerous good in sense of this transport regulation.
14.4. Packing group:	No dangerous good in sense of this transport regulation.
Inland waterways transport (ADN)	
14.1. UN number or ID number:	No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name:	No dangerous good in sense of this transport regulation.
<u>14.3. Transport hazard class(es):</u>	No dangerous good in sense of this transport regulation.
14.4. Packing group:	No dangerous good in sense of this transport regulation.
Marine transport (IMDG)	
14.1. UN number or ID number:	No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name:	No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es):	No dangerous good in sense of this transport regulation.
14.4. Packing group:	No dangerous good in sense of this transport regulation.
Air transport (ICAO-TI/IATA-DGR)	
14.1. UN number or ID number:	No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name:	No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es):	No dangerous good in sense of this transport regulation.
14.4. Packing group:	No dangerous good in sense of this transport regulation.
 14.6. Special precautions for user No dangerous good in sense of this transport 14.7. Maritime transport in bulk according to No dangerous good in sense of this transport 	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 Directive 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). Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.
Water hazard class (D):	3 - highly hazardous to water
SECTION 16: Other information	

Changes

This data sheet contains changes from the previous version in section(s): 1,9.



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Abbreviations and acronyms Met. Corr: Corrosive to metals Acute Tox: Acute toxicity Skin Irrit: Skin irritation Eye Irrit: Eye irritation Skin Sens: Skin sensitisation Carc: Carcinogenicity STOT RE: Specific target organ toxicity - repeated exposure Aquatic Acute: Acute aquatic hazard

Classification for mixtures and used evaluation method according to GB CLP Regulation

Classification	Classification procedure
Skin Irrit. 2; H315	Calculation method
Eye Irrit. 2; H319	Calculation method
Skin Sens. 1; H317	Calculation method
Carc. 2; H351	Calculation method
STOT RE 2; H373	Calculation method

Relevant H and EUH statements (number and full text)

H290 May be corrosive to metals.	
H302 Harmful if swallowed.	
H312 Harmful in contact with skin.	
H315 Causes skin irritation.	
H317 May cause an allergic skin reaction.	
H319 Causes serious eye irritation.	
H351 Suspected of causing cancer.	
H373 May cause damage to organs throug	gh prolonged or repeated exposure.
H400 Very toxic to aquatic life.	

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 information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights.

The receiver of our product is singularly responsible for adhering to existing laws and regulations.

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