

# **Safety Data Sheet**

according to Regulation (EC) No 1907/2006

## Kalium-Standardlösung 5,0 mg K/l hergestellt aus Kaliumchlorid in Wasser

Revision date: 10.09.2024 Product code: 32369 Page 1 of 10

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

## 1.1. Product identifier

Kalium-Standardlösung 5,0 mg K/l hergestellt aus Kaliumchlorid in Wasser

## 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: 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 Dangerous Goods] Incidents Spill, Leak, Fire,

<u>number:</u> Exposure, or Accident Call CHEMTREC Day or Night Within USA and Canada:

1-800-424-9300 Outside USA and Canada: +1 703-741-5970 (collect calls

accepted)

#### **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

This mixture is not classified as hazardous in accordance with Regulation (EC) No 1272/2008.

## 2.2. Label elements

### Regulation (EC) No 1272/2008

### Special labelling of certain mixtures

EUH210 Safety data sheet available on request.

#### 2.3. Other hazards

No data available

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

## 3.2. Mixtures

### **Chemical characterization**

Mixtures in aqueous solution



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# Relevant ingredients

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (Regulation (EC) No 1272/2008)			
7647-17-8	caesium chloride			< 1 %
	231-600-2		01-2119977124-35	
	Repr. 2; H361			
7447-40-7	40-7 potassium chloride			< 0.001 %
	231-211-8			
		•	•	

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		
7647-17-8	231-600-2	caesium chloride	< 1 %
	dermal: LD50 = > 2000 mg/kg; oral: LD50 = 2500 mg/kg		
7447-40-7	231-211-8	potassium chloride	< 0.001 %
	oral: LD50 = ca. 2600 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

Wash immediately with: Water

Take off immediately all contaminated clothing and wash it before reuse.

## After contact with eyes

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

### 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

No data available

# 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



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### 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.

#### **Additional information**

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

### 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 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

Handle and open container with care.

Keep container tightly closed.

Avoid contact with skin, eyes and clothes.

## Advice on protection against fire and explosion

Usual measures for fire prevention.

#### Advice on general occupational hygiene

Wash contaminated clothing prior to re-use.

Do not breathe vapour/aerosol.

Avoid contact with skin, eyes and clothes.

### Further information on handling

Wash contaminated clothing before reuse.

Wash hands before breaks and after work.

## 7.2. Conditions for safe storage, including any incompatibilities



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# Requirements for storage rooms and vessels

Store in a well-ventilated place. Keep container tightly closed.

## Hints on joint storage

No data available

# 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

## **DNEL/DMEL values**

CAS No	Substance			
DNEL type		Exposure route	Effect	Value
7647-17-8	caesium chloride			
Worker DNEL,	long-term	inhalation	systemic	1,47 mg/m³
Worker DNEL,	long-term	dermal	systemic	4,18 mg/kg bw/day
7447-40-7	potassium chloride			
Worker DNEL,	long-term	inhalation	systemic	1064 mg/m³
Worker DNEL,	acute	inhalation	systemic	5320 mg/m³
Worker DNEL,	long-term	dermal	systemic	303 mg/kg bw/day
Worker DNEL,	acute	dermal	systemic	910 mg/kg bw/day
Consumer DN	EL, long-term	inhalation	systemic	273 mg/m³
Consumer DN	EL, acute	inhalation	systemic	1365 mg/m³
Consumer DN	EL, long-term	dermal	systemic	182 mg/kg bw/day
Consumer DNEL, acute		dermal	systemic	910 mg/kg bw/day
Consumer DNI	Consumer DNEL, long-term		systemic	91 mg/kg bw/day
Consumer DNEL, acute		oral	systemic	455 mg/kg bw/day



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#### **PNEC values**

CAS No	Substance	
Environmental compartment		Value
7647-17-8	caesium chloride	
Freshwater		1,25 mg/l
Freshwater (in	ermittent releases)	0,37 mg/l
Marine water		0,13 mg/l
Freshwater sed	diment	4,9 mg/kg
Marine sedime	nt	0,49 mg/kg
Micro-organisn	ns in sewage treatment plants (STP)	100,3 mg/l
Soil		0,25 mg/kg
7447-40-7	potassium chloride	
Freshwater		0,1 mg/l
Freshwater (intermittent releases)		1 mg/l
Marine water		0,1 mg/l
Micro-organisms in sewage treatment plants (STP)		10 mg/l

### 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**

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 KCL 741 Dermatril® L NBR (Nitrile rubber) 0,11mm

Wearing time with permanent contact: >480min

By short-term hand contact KCL 741 Dermatril® L NBR (Nitrile rubber) 0,11mm

Wearing time with occasional contact (splashes): >480min

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.

# Respiratory protection

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



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### **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:

Boiling point or initial boiling point and

No data available

No data available

boiling range:

Flammability: No data available Lower explosion limits: No data available Upper explosion limits: No data available Flash point: No data available Auto-ignition temperature: No data available Decomposition temperature: No data available No data available pH-Value: No data available Viscosity / kinematic: Water solubility: No data available

Solubility in other solvents

No data available

Partition coefficient n-octanol/water:

Vapour pressure:

Vapour pressure:

No data available

Vapour pressure:

No data available

Density:

No data available

Bulk density:

No data available

Relative vapour density:

No data available

### 9.2. Other information

# Information with regard to physical hazard classes

Explosive properties

No data available

Sustaining combustion: No data available

Self-ignition temperature

Solid: No data available Gas: No data available

Oxidizing properties

No data available

Other safety characteristics

Evaporation rate:

Solvent separation test:

No data available

Solvent content:

Solid content:

Sublimation point:

Softening point:

No data available

No data available:

Viscosity / dynamic:

No data available

No data available

#### **Further Information**

No data available



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### **SECTION 10: Stability and reactivity**

#### 10.1. Reactivity

No data available

## 10.2. Chemical stability

No data available

### 10.3. Possibility of hazardous reactions

No data available

### 10.4. Conditions to avoid

No data available

### 10.5. Incompatible materials

No data available

#### 10.6. Hazardous decomposition products

No data available

#### **Further information**

No data available

# **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
7647-17-8	caesium chloride					
	oral	LD50 mg/kg	2500	Mouse	Mutation Research, 244, 295-298 (1990)	other: no data
	dermal	LD50 mg/kg	> 2000	Rat	Study report (2012)	OECD Guideline 402
7447-40-7	potassium chloride					
	oral	LD50 mg/kg	ca. 2600	rat, guinea pig, sheep, goat	J Pharmacol Exp Therap 35, 1-15, 1929 (1	

#### Irritation and corrosivity

Skin corrosion/irritation: Based on available data, the classification criteria are not met.

Serious eye damage/eye irritation: Based on available data, the classification criteria are not met.

### 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.



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## 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**

No data available

# **SECTION 12: Ecological information**

### 12.1. Toxicity

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

CAS No	Chemical name						
	Aquatic toxicity	Dose		[h]   [d]	Species	Source	Method
7647-17-8	caesium chloride						
	Acute fish toxicity	LC50 mg/l	> 100	96 h	Danio rerio	Study report (2011)	OECD Guideline 203
	Acute algae toxicity	ErC50 mg/l	133,99	72 h	Pseudokirchneriella subcapitata	Study report (2011)	OECD Guideline 201
	Acute crustacea toxicity	EC50 mg/l	37,4	48 h	Daphnia magna	Study report (2012)	OECD Guideline 202
	Fish toxicity	NOEC	43 mg/l	35 d	Danio rerio	Study report (2012)	OECD Guideline 210
	Crustacea toxicity	NOEC mg/l	15,8	21 d	Daphnia magna	Study report (2012)	OECD Guideline 211
	Acute bacteria toxicity	EC50 mg/l ( )	> 1000	3 h	activated sludge, domestic	Study report (2011)	OECD Guideline 209
7447-40-7	potassium chloride						
	Acute fish toxicity	LC50	880 mg/l	96 h	Pimephales promelas	Environmental Toxicology and Chemistry,	OECD Guideline 203
	Acute algae toxicity	ErC50 mg/l	> 100	72 h	Desmodesmus subspicatus	Study report (2010)	OECD Guideline 201
	Acute bacteria toxicity	EC50 mg/l ( )	> 1000	3 h	activated sludge, domestic	Study report (2010)	OECD Guideline 209

### 12.2. Persistence and degradability

No data available

### 12.3. Bioaccumulative potential

No data available

## Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
7647-17-8	caesium chloride	0,54

## 12.4. Mobility in soil

No data available

## 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.



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#### 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

No data available

#### **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.

### 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 (A	DR/RID)
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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.
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.

#### 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.

## 14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

### 14.6. Special precautions for user

No dangerous good in sense of this transport regulation.

# 14.7. Maritime transport in bulk according to IMO instruments

No dangerous good in sense of this transport regulation.

## **SECTION 15: Regulatory information**

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

## National regulatory information

Water hazard class (D): -- non-hazardous to water



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### **Additional information**

No data available

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

#### Changes

This data sheet contains changes from the previous version in section(s): 12.

### Abbreviations and acronyms

Repr: Reproductive toxicity

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

H361 Suspected of damaging fertility or the unborn child.

EUH210 Safety data sheet available on request.

#### **Further Information**

Provide appropriate information, instructions and training to users

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.)