



Safety Data Sheet

according to Regulation (EC) No 1907/2006

ISA solution c(KCI) = 1 mol/l auxiliary solution for METROHM					
Revision date: 17.11.2023	Product code: 21728		Page 1 of 9		
SECTION 1: Identification of the	ne substance/mixture and of the comp	any/undertaking			
<u>1.1. Product identifier</u> ISA solution c(KCI) = 1 mol/l auxiliary solution for METROHM					
1.2. Relevant identified uses of the	e substance or mixture and uses advised	against			
	stances as such or in preparations at indust omain (administration, education, entertainm				
Uses advised against					
Do not use for private purpo	oses (household).				
1.3. Details of the supplier of the	<u>safety data sheet</u>				
Company name:	AnalytiChem GmbH				
Street:	Stempelstraße 6				
Place:	D-47167 Duisburg	T (
Telephone: E-mail:	0203/5194-0	Telefax: 0203/5194-290			
Contact person:	info@analytichem.de 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, number: 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

2.3. Other hazards

No data available

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

Mixtures in aqueous solution



ISA solution c(KCI) = 1 mol/l auxiliary solution for METROHM

Revision date: 17.11.2023

Product code: 21728

Page 2 of 9

Relevant ingredients

CAS No	Chemical name	Chemical name			Quantity	
	EC No	EC No Index No REACH No				
	Classification (Regulation (EC) No	1272/2008)				
7447-40-7	potassium chloride				5 - < 10 %	
	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					
	Specific Cond	z. Limits, M-factors and ATE			
7447-40-7	231-211-8	potassium chloride	5 - < 10 %		
	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

Irritant Vomiting Gastrointestinal complaints Cardiac arrhythmias 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



ISA solution c(KCI) = 1 mol/l auxiliary solution for METROHM

Revision date: 17.11.2023

Product code: 21728

Page 3 of 9

5.2. Special hazards arising from the substance or mixture

Non-combustible liquids Hazardous combustion products In case of fire may be liberated: Hydrogen chloride (HCI)

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. Use personal protection equipment. Avoid contact with skin, eyes and clothes. Remove persons to safety. Emergency procedures 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

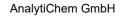
Keep container tightly closed. Avoid contact with skin, eyes and clothes.

Advice on protection against fire and explosion

Usual measures for fire prevention.

Advice on general occupational hygiene

Wash contaminated clothing prior to re-use.





Safety Data Sheet

according to Regulation (EC) No 1907/2006

ISA solution c(KCI) = 1 mol/l auxiliary solution for METROHM

Revision date: 17.11.2023

Product code: 21728

Page 4 of 9

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

Requirements for storage rooms and vessels

Keep container tightly closed.

Hints on joint storage

No data available

Further information on storage conditions

storage temperature +15°C - +25°C

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
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 DNI	EL, long-term	dermal	systemic	182 mg/kg bw/day
Consumer DNI	EL, acute	dermal	systemic	910 mg/kg bw/day
Consumer DN	EL, long-term	oral	systemic	91 mg/kg bw/day
Consumer DNEL, acute		oral	systemic	455 mg/kg bw/day

PNEC values

CAS No	Substance		
Environmental compartment Value			
7447-40-7 potassium chloride			
Freshwater 0,1 m		0,1 mg/l	
Freshwater (intermittent releases) 1 mg/l			
Marine water 0,1 m		0,1 mg/l	
Micro-organisi	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



Safety Data Sheet

according to Regulation (EC) No 1907/2006

ISA solution c(KCI) = 1 mol/l auxiliary solution for METROHM

Revision date: 17.11.2023

Product code: 21728

Page 5 of 9

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 Recommended glove articles: KCL 741 Dermatril® L Recommended material: NBR (Nitrile rubber) 0,11 mm Wearing time with permanent contact: > 480 min

By short-term hand contact Recommended glove articles: 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.

Respiratory protection

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

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: Colour:	Liquid colourless	
Odour:	odourless	
Melting point/freezing point:		No data available
Boiling point or initial boiling point and		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
pH-Value:		No data available
Viscosity / kinematic:		No data available
Water solubility:		completely miscible
Solubility in other solvents		
No data available		
Partition coefficient n-octanol/water:		No data available
Vapour pressure:		No data available
Vapour pressure:		No data available
Density:		1,1307 g/cm³



ISA solution c(KCI) = 1 mol/l auxiliary solution for METROHM				
Revision date: 17.11.2023	Product code: 21728	Page 6 of 9		
Bulk density:	No data available			
Relative vapour density:	No data available			
9.2. Other information				
Information with regard to physical haz	zard 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:	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			
No data available:				
Viscosity / dynamic:	No data available			
Flow time:	No data available			
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

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



ISA solution c(KCI) = 1 mol/l auxiliary solution for METROHM

Revision date: 17.11.2023

Product code: 21728

Page 7 of 9

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
7447-40-7	potassium chloride				
	oral	LD50 ca. 260 mg/kg) rat, guinea pig, sheep, goat	J Pharmacol Exp Therap 35, 1-15, 1929 (1	

Irritation and corrosivity

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

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

Irritant Vomiting Gastrointestinal complaints Cardiac arrhythmias Circulatory collapse

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
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		Desmodesmus subspicatus	Study report (2010)	OECD Guideline 201
	Acute bacteria toxicity	EC50 mg/l()	> 1000		activated sludge, domestic	Study report (2010)	OECD Guideline 209

12.2. Persistence and degradability

No data available

12.3. Bioaccumulative potential

No data available



ISA solution c(KCI) = 1 mol/l auxiliary solution for METROHM

Revision date: 17.11.2023

Product code: 21728

Page 8 of 9

<u>12.4. Mobility in soil</u>

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.

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. Do not mix with other wastes.

Contaminated packaging

The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

Packing which cannot be properly cleaned must be disposed of.

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) No dangerous good in sense of this transport regulation. 14.1. UN number or ID number: 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:

 14.2. UN proper shipping name:

 14.3. Transport hazard class(es):

 14.4. Packing group:

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS:

14.6. Special precautions for user

No dangerous good in sense of this transport regulation.

No

14.7. Maritime transport in bulk according to IMO instruments

No dangerous good in sense of this transport regulation.

No dangerous good in sense of this transport regulation.

No dangerous good in sense of this transport regulation.

No dangerous good in sense of this transport regulation. No dangerous good in sense of this transport regulation.



ISA solution c(KCI) = 1 mol/l auxiliary solution for METROHM

Revision date: 17.11.2023

Product code: 21728

Page 9 of 9

SECTION 15: Regulatory information

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

EU regulatory information

Information according to Directive 2012/18/EU (SEVESO III):	Not subject to 2012/18/EU (SEVESO III)
National regulatory information	
Water hazard class (D):	1 - slightly hazardous to water

Additional information

No data available

No data available

SECTION 16: Other information

Changes

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

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.)