

Creation Date 07-Aug-2009

Revision Date 07-Aug-2009

Revision Number 1

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product Name Potassium chloride
Cat No. 196770000; 196770010; 196770050
Synonyms No information available.
Recommended Use Laboratory chemicals

Company Acros Organics BVBA
Janssen Pharmaceuticaan 3a
2440 Geel, Belgium

Emergency Telephone Number For information in the US, call: 800-ACROS-01
For information in Europe, call: +32 14 57 52 11

Emergency Number, Europe: +32 14 57 52 99
Emergency Number, US: 201-796-7100

CHEMTREC Phone Number, US: 800-424-9300
CHEMTREC Phone Number, Europe: 703-527-3887

2. HAZARDS IDENTIFICATION

Not a hazardous substance or preparation according to EC-directives 67/548/EEC or 1999/45/EC.

R -phrase(s)
none

3. COMPOSITION/INFORMATION ON INGREDIENTS**Haz/Non-haz**

Component	Weight %	EC No.	Classification
Potassium chloride 7447-40-7	>95	EEC No. 231-211-8	-

For the full text of the R phrases mentioned in this Section, see Section 16

Potassium chloride

Revision Date 07-Aug-2009

4. FIRST AID MEASURES

Eye Contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Obtain medical attention.
Skin Contact	Wash off immediately with plenty of water for at least 15 minutes. Get medical attention immediately if symptoms occur.
Ingestion	Do not induce vomiting. Obtain medical attention.
Inhalation	Move to fresh air. If breathing is difficult, give oxygen. Get medical attention immediately if symptoms occur.
Notes to Physician	Treat symptomatically.

5. FIRE-FIGHTING MEASURES**Suitable Extinguishing Media**

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Extinguishing media which must not be used for safety reasons

No information available.

Specific Hazards Arising from the Chemical

Keep product and empty container away from heat and sources of ignition

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

Flash Point

No information available.

Method

No information available.

Autoignition Temperature

No information available.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions	Ensure adequate ventilation. Use personal protective equipment. Avoid dust formation.
Environmental Precautions	Should not be released into the environment.
Methods for Containment and Clean Up	Sweep up or vacuum up spillage and collect in suitable container for disposal. Avoid dust formation.

Potassium chloride

Revision Date 07-Aug-2009

7. HANDLING AND STORAGE

Handling	Wear personal protective equipment. Ensure adequate ventilation. Avoid contact with skin, eyes and clothing. Avoid ingestion and inhalation. Avoid dust formation.
Storage	Keep containers tightly closed in a dry, cool and well-ventilated place.
Specific use(s)	No information available.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION**Exposure limits**

The product does not contain any hazardous materials with occupational exposure limits established.

Occupational exposure controls

Engineering Measures	Ensure that eyewash stations and safety showers are close to the workstation location Ensure adequate ventilation, especially in confined areas
Personal Protective Equipment	
Respiratory Protection	Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.
Eye Protection	Tightly fitting safety goggles
Skin and body protection	Wear appropriate protective gloves and clothing to prevent skin exposure.
Hand Protection	Protective gloves
Hygiene Measures	Handle in accordance with good industrial hygiene and safety practice
Environmental exposure controls	No information available.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Solid
Appearance	White
Odor	odorless
pH	No information available.
Boiling Point/Range	1420°C / 2588°F @ 760 mmHg
Melting Point/Range	770°C / 1418°F
Flash Point	No information available.
Water Solubility	340 g/l (20°C)
Specific Gravity	1.987
Molecular Formula	Cl K
Molecular Weight	74.54

10. STABILITY AND REACTIVITY

Potassium chloride

Revision Date 07-Aug-2009

10. STABILITY AND REACTIVITY

Stability	Hygroscopic.
Conditions to Avoid	Incompatible products. Excess heat. Avoid dust formation. Exposure to moist air or water.
Incompatible Materials	Strong oxidizing agents
Hazardous Decomposition Products	Hydrogen chloride gas
Hazardous Polymerization	Hazardous polymerization does not occur.
Hazardous Reactions .	None under normal processing..

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Component Information

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Potassium chloride	2600 mg/kg (Rat)		

Chronic Toxicity

Carcinogenicity	There are no known carcinogenic chemicals in this product
Sensitization	No information available.
Neurological Effects	No information available.
Mutagenic Effects	No information available.
Reproductive Effects	No information available.
Developmental Effects	No information available.
Target Organs	None known.
Other Adverse Effects	See actual entry in RTECS for complete information. The toxicological properties have not been fully investigated..

12. ECOLOGICAL INFORMATION

Ecotoxicity



Potassium chloride

Revision Date 07-Aug-2009

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
Potassium chloride	EC50: 2500 mg/L/72h			EC50: 825 mg/L/48h

Persistence and Degradability No information available
Bioaccumulative Potential No information available.
Mobility No information available.

13. DISPOSAL CONSIDERATIONS

Waste from Residues / Unused Products Dispose of in accordance with local regulations
Contaminated Packaging Empty containers should be taken for local recycling, recovery or waste disposal

14. TRANSPORT INFORMATION

IMDG/IMO Not regulated
ADR Not regulated
IATA Not regulated

15. REGULATORY INFORMATION

Not a hazardous substance or preparation according to EC-directives 67/548/EEC or 1999/45/EC

Labelling

R -phrase(s)
none

S -phrase(s)
S24/25 - Avoid contact with skin and eyes

International Inventories



SAFETY DATA SHEET

Potassium chloride

Revision Date 07-Aug-2009

Component	EINECS	ELINCS	NLP	TSCA	DSL	NDSL	PICCS	ENCS	CHINA	AICS	KECL
Potassium chloride	231-211-8	-		X	X	-	X	X	X	X	KE-29086 X

16. OTHER INFORMATION

Prepared By Regulatory Affairs
Creation Date 07-Aug-2009
Revision Date 07-Aug-2009
Revision Summary "****", and red text indicates revision
Restrictions on use No information available.
Training advice No information available.
Literary reference No information available.

Disclaimer

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of Safety Data Sheet

SAFETY DATA SHEET

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product Identifier

Product Name: Buffer Solution pH 4.01 ± 0.01

Catalog Number:168400

Chemical Name: pH buffer

Chemical Formula: Not applicable

Chemical Family: Not applicable

Hazard: Practically non-toxic.

Date of SDS Preparation:

Day: 29

Month: November

Year: 2014

Details of the supplier of the safety data sheet

Company Name: Rocker Scientific Co.,Ltd.

Address: 6F., No.6, Zhulin Rd., Linkou Dist., New Taipei City 244, Taiwan (R.O.C.)

Telephone: + 886-2-26033311

SECTION 2: HAZARDS IDENTIFICATION

Emergency Overview

Appearance: Clear, red

liquid Odor: None

Label:



Corrosion



attention

Potential Health Effects:

Eye Contact: No effects are anticipated

Skin Contact: No effects are anticipated

Skin Absorption: No effects are anticipated

Target Organs: Not applicable

Ingestion: No Effects

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Demineralized Water

Percent Range: >95.0

Percent Range Units: weight / weight

Hazard: No effects anticipated.

Other components, each

Percent Range: < 1.0

Percent Range Units: volume / volume

Hazard: Any ingredient(s) of this product listed as "Other component(s)" is not considered a health hazard to the user of this product.

Potassium Acid Phthalate

TSCA CAS Number: 877-24-7

Percent Range: 1.0 - 5.0

Percent Range Units: weight / volume

Hazard: May cause irritation.

SECTION 4: FIRST AID MEASURE

Eye Contact: Flush eyes with water. Call physician if irritation develops.

Skin Contact (First Aid): Wash skin with soap and plenty of water.

Ingestion (First Aid): Give large quantities of water. Call physician immediately.

Inhalation: None required.

SECTION 5: FIREFIGHTING MEASURES

Flammable Properties: Material will not burn.

Flash Point: Not applicable

Method: Not applicable

Flammability Limits:

Lower Explosion Limits: Not applicable

Upper Explosion Limits: Not applicable

Autoignition Temperature: Not applicable

Hazardous Combustion Products: Not applicable

Fire / Explosion Hazards: None reported

Static Discharge: None reported.

Mechanical Impact: None reported

Extinguishing Media: Use media appropriate to surrounding fire conditions

Fire Fighting Instruction: As in any fire, wear self-contained breathing apparatus pressure demand and full protective gear.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Containment Technique:

Stop all leaks. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Absorb spill with inert material (e.g. dry sand, earth).

Clean-up Technique:

Absorb spilled liquid with non-reactive sorbent material. Place material in a plastic bag. Mark bag 'Non-hazardous trash', and dispose of as normal refuse.

SECTION 7: HANDLING AND STORAGE

Handling: Avoid contact with eyes Wash thoroughly after handling.

Storage: Keep container tightly closed when not in use.

Flammability Class: Not applicable

SECTION 8: EXPOSURE CONTROLS / PERSONAL EQUIPMENT

Engineering Controls: Maintain general industrial hygiene practices when using this product.

Personal Protective Equipment: None

Eye Protection: safety glasses with top and side shields

Skin Protection: disposable latex gloves

Inhalation Protection: adequate ventilation

Precautionary Measures: Avoid contact with: eyes Wash thoroughly after handling.

SECTION 9: PHYSICAL / CHEMICAL PROPERTIES

Appearance: Clear, red liquid

Physical State: Liquid

Odor: None

pH: 4.01

Melting Point: < 0°C (< 32°F)

Specific Gravity (water = 1): 1.002 ned

Solubility:

Water: Soluble

Acid: Soluble

Other: Not determined

Metal Corrosivity: Not determined

SECTION 10: STABILITY AND REACTIVITY

Chemical Stability: Stable when stored under proper conditions.

Conditions to Avoid: Extreme temperatures

Reactivity / Incompatibility: None reported

Hazardous Decomposition: None reported.

SECTION 11: TOXICOLOGICAL INFORMATION

Product Toxicological Data: LD50: None reported

Skin and Eye Irritation Data: None reported

Mutation Data: None reported

Reproductive Effects Data: None reported

SECTION 12: ECOLOGICAL INFORMATION

Product Ecological Information: No ecological data available for this product.

Ingredient Ecological Information: No ecological data available for the ingredients of this product.

SECTION 13: DISPOSAL CONSIDERATIONS

EPA Waste ID Number: None

Special Instructions (Disposal): Adjust to a pH between 6 and 9 with an alkali, such as soda ash or sodium bicarbonate. Open cold water tap completely, slowly pour the reacted material to the drain.

Empty Containers: Rinse three times with an appropriate solvent. Dispose of empty container as normal trash.

NOTICE (Disposal): These disposal guidelines are based on federal regulations and may be superseded by more stringent state or local requirements. Please consult your local environmental regulators for more information.

SECTION 14: TRANSPORT INFORMATION

D.O.T.:

D.O.T. Proper Shipping Name: Not Currently Regulated

DOT Hazard Class: NA

DOT Subsidiary Risk: NA

DOT ID Number: NA

DOT Packing Group: NA

I.C.A.O.:

I.C.A.O. Proper Shipping Name: Not Currently Regulated

ICAO Hazard Class: NA

ICAO Subsidiary Risk: NA

ICAO ID Number: NA

ICAO Packing Group: NA

I.M.O.:

I.M.O. Proper Shipping Name: Not Currently Regulated

I.M.O. Hazard Class: NA

I.M.O. Subsidiary Risk: NA

I.M.O. ID Number: NA

I.M.O. Packing Group: NA

SECTION 15: REGULATORY INFORMATION

U.S. Federal Regulations:

O.S.H.A.:

This product does not meet the criteria for a hazardous substance as defined in the Hazard Communication Standard. (29 CFR 1910.1200)

E.P.A.:

S.A.R.A. Title III Section 311/312 Categorization (40 CFR 370): This product is not hazardous under 29 CFR.1910.1200 and therefore is not covered by Title III under SARA.

S.A.R.A. Title III Section 313 (40 CFR 372): This product does NOT contain any chemical subject to the reporting requirements of Section 313 of Title III of SARA.

SECTION 16: OTHER INFORMATION

Intended Use: Buffer

References:

29 CFR 1900 - 1910 (Code of Federal Regulations - Labor).

Air Contaminants, Federal Register, Vol. 54, No. 12. Thursday, January 19, 1989. pp. 2332-2983. TLV's Threshold Limit Values and Biological Exposure Indices for

Legend:

NA - Not Applicable w/w - weight/weight

ND - Not Determined w/v - weight/volume

NV - Not Available v/v - volume/volume

USER RESPONSIBILITY:

Each user should read and understand this information and incorporate it in individual site safety programs in accordance with applicable hazard communication standards and regulations.

This information was compiled from current manufacturer's SDS's of the component parts of the product.

Disclaimer: The Manufacturer believes that the information contained in the Material Safety Data Sheet is accurate. The suggested procedures are based on experience as of the date of publication. They are not necessarily all inclusive nor fully adequate in every circumstance. Also, the suggestions should not be confused with, nor followed in violation of applicable laws, regulations, rules or insurance requirements.

SAFETY DATA SHEET

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product Identifier

Product Name: Buffer Solution pH 7.00 ± 0.01

Catalog Number: 168700

Chemical Name: pH buffer

Chemical Formula: Not applicable

Chemical Family: Not applicable

Hazard: Practically non-toxic.

Date of SDS Preparation:

Day: 29

Month: November

Year: 2014

Details of the supplier of the safety data sheet

Company Name: Rocker Scientific Co.,Ltd.

Address: 6F., No.6, Zhulin Rd., Linkou Dist., New Taipei City 244, Taiwan (R.O.C.)

Telephone: + 886-2-26033311

SECTION 2: HAZARDS IDENTIFICATION

Emergency Overview

Appearance: Clear, yellow

liquid Odor: None

Label:



Corrosion



attention

Potential Health Effects:

Eye Contact: No effects are anticipated

Skin Contact: No effects are anticipated

Skin Absorption: No effects are anticipated

Target Organs: Not applicable

Ingestion: No Effects

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Potassium Phosphate, Monobasic

Percent Range: < 1.0

Percent Range Units: weight / weight

Hazard: May cause irritation.

Demineralized Water

Percent Range: >95.0

Percent Range Units: volume / volume

Hazard: No effects anticipated.

Other components, each

Percent Range: < 1.0

Percent Range Units: volume / volume

Hazard: Any ingredient(s) of this product listed as "Other component(s)" is not considered a health hazard to the user of this product.

Sodium Phosphate, Dibasic

Percent Range: < 1.0

Percent Range Units: weight / weight

Hazard: May cause irritation.

SECTION 4: FIRST AID MEASURE

Eye Contact: Flush eyes with water. Call physician if irritation develops.

Skin Contact (First Aid): Wash skin with soap and plenty of water.

Ingestion (First Aid): Give large quantities of water. Call physician immediately.

Inhalation: None required.

SECTION 5: FIREFIGHTING MEASURES

Flammable Properties: Material will not burn.

Flash Point: Not applicable

Method: Not applicable

Flammability Limits:

Lower Explosion Limits: Not applicable

Upper Explosion Limits: Not applicable

Autoignition Temperature: Not applicable

Hazardous Combustion Products: Not applicable

Fire / Explosion Hazards: None reported

Static Discharge: None reported.

Mechanical Impact: None reported

Extinguishing Media: Use media appropriate to surrounding fire conditions

Fire Fighting Instruction: As in any fire, wear self-contained breathing apparatus pressure demand and full protective gear.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Containment Technique:

Stop all leaks. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Absorb spill with inert material (e.g. dry sand, earth).

Clean-up Technique:

Absorb spilled liquid with non-reactive sorbent material. Place material in a plastic bag. Mark bag 'Non-hazardous trash', and dispose of as normal refuse.

SECTION 7: HANDLING AND STORAGE

Handling: Avoid contact with eyes Wash thoroughly after handling.

Storage: Keep container tightly closed when not in use.

Flammability Class: Not applicable

SECTION 8: EXPOSURE CONTROLS / PERSONAL EQUIPMENT

Engineering Controls: Maintain general industrial hygiene practices when using this product.

Personal Protective Equipment: None

Eye Protection: safety glasses with top and side shields

Skin Protection: disposable latex gloves

Inhalation Protection: adequate ventilation

Precautionary Measures: Avoid contact with: eyes Wash thoroughly after handling.

SECTION 9: PHYSICAL / CHEMICAL PROPERTIES

Appearance: Yellow and clear, liquid

Physical State: Liquid

Molecular Weight: Not applicable

Odor: None

pH: 7.0 at 25°C

Vapor Pressure: Not determined

Vapor Density (air = 1): Not determined

Boiling Point: ~100°C (~212°F)

Melting Point: ~0°C (~32°F)

Specific Gravity (water = 1): ~1.0

Solubility:

Water: Soluble

Acid: Soluble

Other: Not determined

Metal Corrosivity: Not determined

SECTION 10: STABILITY AND REACTIVITY

Chemical Stability: Stable when stored under proper conditions.

Conditions to Avoid: Extreme temperatures

Reactivity / Incompatibility: None reported

Hazardous Decomposition: None reported.

SECTION 11: TOXICOLOGICAL INFORMATION

Product Toxicological Data: LD50: None reported

Skin and Eye Irritation Data: None reported

Mutation Data: None reported

Reproductive Effects Data: None reported

SECTION 12: ECOLOGICAL INFORMATION

Product Ecological Information: No ecological data available for this product.

Ingredient Ecological Information: No ecological data available for the ingredients of this product.

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EPA Waste ID Number: None

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Empty Containers: Rinse three times with an appropriate solvent. Dispose of empty container as normal trash.

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SECTION 14: TRANSPORT INFORMATION

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DOT Hazard Class: NA

DOT Subsidiary Risk: NA

DOT ID Number: NA

DOT Packing Group: NA

I.C.A.O.:

I.C.A.O. Proper Shipping Name: Not Currently Regulated

ICAO Hazard Class: NA

ICAO Subsidiary Risk: NA

ICAO ID Number: NA

ICAO Packing Group: NA

I.M.O.:

I.M.O. Proper Shipping Name: Not Currently Regulated

I.M.O. Hazard Class: NA

I.M.O. Subsidiary Risk: NA

I.M.O. ID Number: NA

I.M.O. Packing Group: NA

SECTION 15: REGULATORY INFORMATION

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