Revised on: 08.01.2020 Potassium chloride solution 3 M for storage of pH-electrodes
Created on: 08.01.2020

1. Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier
Trade name: Potassium chloride solution 3 M for storage of pH-electrodes
Article number: LC-4408
Registration number: This product is a mixture. REACH Registration Number see section 3..

1.2. Relevant identified uses of the substance or mixture
- **Identified uses:** Reagent for analysis

1.3. Details of the supplier of the safety data sheet

Manufacturer/Supplier:
neoFroxx GmbH
Marie-Curie-Str. 3
D-64683 Einhausen
info@neofroxx.com

Further information obtainable from:
Dep. Quality Control

1.4. Emergency telephone number
+49 (6251) 989 24 - 0 (during normal business hours)

2. Hazards identification

2.1. Classification of the substance or mixture
This substance is not classified as dangerous according to European Union legislation.

2.2. Label elements
Labelling according to Regulation (EC) No 1272/2008:
Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

2.3. Other hazards
None known.

3. Composition / information on ingredients

Chemical nature: Aqueous solution

3.1. Substance
Not applicable

3.2. Mixture
Remarks:
No disclosure requirement according to Regulation (EC) No. 1907/2006.

4. First aid measures

4.1. Description of first aid measures
After inhalation: fresh air.
In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower.
After eye contact: rinse out with plenty of water.
After swallowing: make victim drink water (two glasses at most). Consult doctor if feeling unwell.

4.2. Most important symptoms and effects, both acute and delayed
irritant effects, Nausea, Vomiting, cardiovascular disorders

4.3. Indication of any immediate medical attention and special treatment needed
No information available.

5. Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media:

For this substance/mixture no limitations of extinguishing agents are given.

5.2. Special hazards arising from the substance or mixture

Not combustible.

Ambient fire may liberate hazardous vapours.

Fire may cause evolution of:

Hydrogen chloride gas

5.3. Advice for firefighters

Special protective equipment for firefighters:

In the event of fire, wear self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

Further information:

Suppress (knock down) gases/vapours/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Do not breathe vapours, aerosols. Evacuate the danger area, observe emergency procedures, consult an expert.

Advice for emergency responders:

Protective equipment see section 8.

6.2. Environmental precautions:

Do not let product enter drains.

6.3. Methods and material for containment and cleaning up:

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up with liquid-absorbent material. Dispose of properly. Clean up affected area.

6.4. Reference to other sections

Indications about waste treatment see section 13.

7. Handling and storage

7.1. Precautions for safe handling

Advice on safe handling:

Observe label precautions.

Hygiene measures:

Change contaminated clothing. Wash hands after working with substance.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions:

Tightly closed.

Recommended storage temperature: see product label.

7.3. Specific end use(s)
Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

8. Exposure controls / personal protection

8.1. Control parameters

8.2. Exposure controls

Engineering measures:

Technical measures and appropriate working operations should be given priority over the use of personal protective equipment.

See section 7.1.

Individual protection measures:

Protective clothing needs to be selected specifically for the workplace, depending on concentrations and quantities of the hazardous substances handled. The chemical resistance of the protective equipment should be enquired at the respective supplier.

Eye/face protection:

Safety glasses

Hand protection:

full contact:

Glove material: Nitrile rubber
Glove thickness: 0,11 mm
Break through time: > 480 min

splash contact:

Glove material: Nitrile rubber
Glove thickness: 0,11 mm
Break through time: > 480 min

The protective gloves to be used must comply with the specifications of EC Directive 89/686/EEC and the related standard EN374, for example KCL 741 Dermatril® L (full contact), KCL 741 Dermatril® L (splash contact).

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).

Respiratory protection:

Not required; except in case of aerosol formation.

Environmental exposure controls:

Do not let product enter drains.

9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Form: liquid

Colour: colourless

Odour: odourless

Odour Threshold: Not applicable

pH: ca. 5,5 at 20 °C

Melting point: No information available.
Boiling point: No information available.
Flash point: No information available.
Evaporation rate: No information available.
Flammability (solid, gas): No information available.
Lower explosion limit: No information available.
Upper explosion limit: No information available.
Vapour pressure: No information available.
Relative vapour density: No information available.
Density: 1,13 g/cm3 at 20 °C
Relative density: No information available.
Water solubility: at 20 °C soluble
Partition coefficient: n-octanol/water: No information available.
Auto-ignition temperature: No information available.
Decomposition temperature: No information available.
Viscosity, dynamic: No information available.
Explosive properties: Not classified as explosive.
Oxidizing properties: none

9.2. Other information
none

10. Stability and reactivity

10.1. Reactivity
See section 10.3

10.2. Chemical stability
The product is chemically stable under standard ambient conditions (room temperature) .

10.3. Possibility of hazardous reactions
Violent reactions possible with:
The generally known reaction partners of water.

10.4. Conditions to avoid
no information available

10.5. Incompatible materials:
no information available

10.6. Hazardous decomposition products:
no information available

11. Toxicological information

11.1. Information on toxicological effects
Mixture
Acute oral toxicity:
This information is not available.
Acute inhalation toxicity:
This information is not available.
Acute dermal toxicity:
This information is not available.

Skin irritation:
This information is not available.
Eye irritation:
slight irritation
Sensitisation:
This information is not available.
Germ cell mutagenicity:
This information is not available.
Carcinogenicity:
This information is not available.
Reproductive toxicity:
This information is not available.
Teratogenicity:
This information is not available.
Specific target organ toxicity - single exposure:
This information is not available.
Specific target organ toxicity - repeated exposure:
This information is not available.
Aspiration hazard:
This information is not available.

11.2. Further information
After swallowing of large amounts:
Nausea, Vomiting, cardiovascular disorders, Cardiac irregularities
However, when the product is handled appropriately, hazardous effects are unlikely to occur.
Handle in accordance with good industrial hygiene and safety practice.

12. Ecological information

12.1. Toxicity
No information available.

12.2. Persistence and degradability
No information available.

12.3. Bioaccumulative potential
No information available.

12.4. Mobility in soil
No information available.

12.5. Results of PBT and vPvB assessment
Substance(s) in the mixture do(es) not meet the criteria for PBT or vPvB according to Regulation (EC) No 1907/2006, Annex XIII, or a PBT/vPvB assessment was not conducted.

12.6. Other adverse effects
Additional ecological information:
Discharge into the environment must be avoided.

13. Disposal considerations

13.1. Waste treatment methods

Recommendation:

Chemicals must be disposed of in compliance with the respective national regulations.

Must not be disposed together with household garbage. Do not allow product to reach sewage system

Uncleaned packaging:

Recommendation:

Disposal must be made according to official regulations.

Packagings that may not be cleansed are to be disposed of in the same manner as the product.

Recommended cleansing agents: Water, if necessary together with cleansing agents.

14. Transport information

Land transport (ADR/RID)

14.1 - 14.6

Not classified as dangerous in the meaning of transport regulations.

Inland waterway transport (ADN)

Not relevant

Air transport (IATA)

14.1 - 14.6

Not classified as dangerous in the meaning of transport regulations.

Sea transport (IMDG)

14.1 - 14.6

Not classified as dangerous in the meaning of transport regulations.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not relevant

15. Regulatory information

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

EU regulations:

Major Accident Hazard Legislation:

SEVESO III

Not applicable

Regulation (EC) No 1005/2009 on substances that deplete the ozone layer:

not regulated

Regulation (EC) No 850/2004 of the European Parliament and of the Council of 29 April 2004 on persistent organic pollutants and amending Directive 79/117/EEC:

not regulated

Substances of very high concern (SVHC):

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).

National legislation:

Storage class: 10 - 13

15.2. Chemical safety assessment:

For this product a chemical safety assessment was not carried out.

16. Other information

Training advice:
Provide adequate information, instruction and training for operators.

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Abbreviations and acronyms:
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
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 Harmonised System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative