SAFETY DATA SHEET

Version 5.0 Revision Date 23.12.2010 Print Date 19.10.2011

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

1.1 Product identifiers

Product name : Potassium citrate tribasic monohydrate

Product Number : P1722

Brand : Sigma-Aldrich

1.2 Other means of identification

Citric acid tripotassium salt Tripotassium citrate

1.3 Relevant identified uses of the substance or mixture and uses advised against

For R&D use only. Not for pharmaceutical, household or other uses.

1.4 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich Pte Ltd

1 Science Park Road #02-14 The Capricorn

Singapore Science Park Road II

SINGAPORE 117528

SINGAPORE

Telephone : +65 6779 1200 Fax : +65 6779 1822

1.5 Emergency telephone number

Emergency Phone # : 1-800-262-8200

2. HAZARDS IDENTIFICATION

2.1 GHS Classification

Not a dangerous substance according to GHS.

2.3 Other hazards - none

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Synonyms : Citric acid tripotassium salt

Tripotassium citrate

Formula : $C_6H_5K_3O_7 \cdot H_2O$ Molecular Weight : 324.41 g/mol

Component	Concentration		
Potassium citrate tribasic monohydrate			
CAS-No.	6100-05-6	-	
EC-No.	231-905-0		

Sigma-Aldrich - P1722 Page 1 of 6

4. FIRST AID MEASURES

4.1 Description of first aid measures

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration.

In case of skin contact

Wash off with soap and plenty of water.

In case of eye contact

Flush eyes with water as a precaution.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water.

4.2 Most important symptoms and effects, both acute and delayed

4.3 Indication of immediate medical attention and special treatment needed

no data available

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media

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

5.2 Special hazards arising from the substance or mixture

Carbon oxides, Potassium oxides

5.3 Precautions for fire-fighters

Wear self contained breathing apparatus for fire fighting if necessary.

5.4 Further information

no data available

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Avoid dust formation. Avoid breathing vapors, mist or gas.

6.2 Environmental precautions

Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up

Sweep up and shovel. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For disposal see section 13.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

7.2 Conditions for safe storage, including any incompatibilities

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

Moisture sensitive.

7.3 Specific end uses

no data available

Sigma-Aldrich - P1722 Page 2 of 6

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Occupational Exposure Limits

We are not aware of any national exposure limit.

8.2 Exposure controls

Appropriate engineering controls

General industrial hygiene practice.

Personal protective equipment

Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Body Protection

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

a)	Appearance	Form: crystalline
		Colour: white

b) Odour no data availablec) Odour Threshold no data available

d) pH 8.0 - 9.5

e) Melting/freezing point Melting point/range: 275 °C - dec.

f) Initial boiling point and no data available

boiling range

g) Flash point no data available
h) Evaporation rate no data available
i) Flammability (solid, gas) no data available

) Upper/lower flammability or explosive limits no data available

k) Vapour pressure no data availablel) Vapour density no data availablem) Relative density no data available

Sigma-Aldrich - P1722 Page 3 of 6

n) Water solubility no data availableo) Partition coefficient: no data available

octanol/water

p) Autoignition no data available temperature

q) Decomposition temperature

no data available

r) Viscosity no data available

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

Strong oxidizing agents

10.6 Hazardous decomposition products

Other decomposition products - no data available

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity

no data available

Skin corrosion/irritation

no data available

Serious eye damage/eye irritation

no data available

Respiratory or skin sensitization

no data available

Germ cell mutagenicity

no data available

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as

probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity

no data available

Specific target organ toxicity - single exposure

no data available

Specific target organ toxicity - repeated exposure

no data available

Aspiration hazard

no data available

Potential health effects

Sigma-Aldrich - P1722 Page 4 of 6

Inhalation May be harmful if inhaled. May cause respiratory tract irritation.

Ingestion May be harmful if swallowed.

Skin May be harmful if absorbed through skin. May cause skin irritation.

Eyes May cause eye irritation.

Additional Information

RTECS: Not available

12. ECOLOGICAL INFORMATION

12.1 Toxicity

no data available

12.2 Persistence and degradability

no data available

12.3 Bioaccumulative potential

no data available

12.4 Mobility in soil

no data available

12.5 Results of PBT and vPvB assessment

no data available

12.6 Other adverse effects

no data available

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product

Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging

Dispose of as unused product.

14. TRANSPORT INFORMATION

14.1 UN-Number

ADR/RID: - IMDG: - IATA: -

14.2 UN proper shipping name

ADR/RID: Not dangerous goods IMDG: Not dangerous goods IATA: Not dangerous goods

14.3 Transport hazard class(es)

ADR/RID: - IMDG: - IATA: -

14.4 Packaging group

ADR/RID: - IMDG: - IATA: -

14.5 Environmental hazards

ADR/RID: no IMDG Marine pollutant: no IATA: no

14.6 Special precautions for users

no data available

15. REGULATORY INFORMATION

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

Notification status

AICS: On the inventory, or in compliance with the inventory

DSL: This product contains the following components that are not on the Canadian

Sigma-Aldrich - P1722 Page 5 of 6

DSL nor NDSL lists. - Potassium citrate tribasic monohydrate

ENCS: Not in compliance with the inventory - Potassium citrate tribasic monohydrate

IECSC: On the inventory, or in compliance with the inventory

ISHL:

Not in compliance with the inventory - Potassium citrate tribasic monohydrate

KECI:

Not in compliance with the inventory - Potassium citrate tribasic monohydrate

Not in compliance with the inventory - Potassium citrate tribasic monohydrate

PICCS:

Not in compliance with the inventory - Potassium citrate tribasic monohydrate

16. OTHER INFORMATION

Further information

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Sigma-Aldrich - P1722 Page 6 of 6