

Revision: 2.0
(Replaces revision 1.1 of 04 May 2021)

Revision date: 08 February 2022
Date printed: 12 August 2023

Section 1. Identification

1.1 Product Identifier 0667

Product Name BUFFER REAGENT (for METROHM TOTAL CHLORINE ANALYSER)
CAS Number Mixture
REACH Registration No A registration number is not available as the substance or its uses are exempt, the annual tonnage does not require a registration or the registration is envisaged for a later date.

1.2 Relevant identified uses of the substance or mixture & uses advised against

Uses of Material Chemical for industrial and laboratory use. Not suitable for domestic use.

1.3 Supplier Vickers Laboratories Ltd



Grangefield Industrial Estate
Richardshaw Road
Pudsey
West Yorkshire
LS28 6QW
UNITED KINGDOM

Phone 44 0113 2362811
Fax +44(0)113 2362703
Email safety@viclabs.co.uk
Website www.viclabs.co.uk

1.4 Emergency Telephone (08:00-16:30) +44(0) 113 2362811 (24hr) 112 (Have this document to hand)

Section 2. Hazards Identification

2.1 Classification of the substance or mixture

Classification according to regulation 1272/2008/EC

Spec target organ tox - repeat, category 1

H372: Causes damage to organs through prolonged or repeated exposure.

2.2 Label elements

Labelling according to regulation 1272/2008/EC

Signal word Danger

Hazard Pictograms



Hazard Statements Causes damage to organs through prolonged or repeated exposure.

Precautionary Statements Do not breathe dust / fume / gas / mist / vapours / spray. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Get Medical advice/attention if you feel unwell. Dispose of contents / container to an approved waste disposal plant

Section 3. Composition

3.2 Mixtures

| Component | CAS No. | EEC No. | REACH No. | Conc w/w | CLP Classification (1272/2008/CE) |
|------------------|-----------|-----------|-----------------------|----------|-----------------------------------|
| Potassium iodide | 7681-11-0 | 231-659-4 | 01-2119906339-35-XXXX | 20% | STOT RE 1 |

Section 4. First Aid

4.1 Description of first aid measures

| | |
|--------------------------------------|---|
| Eyes | Irrigate thoroughly with plenty of water for at least 10 minutes, holding the eye open. If discomfort persists OBTAIN MEDICAL ATTENTION. |
| Skin | Wash off skin thoroughly with water. Remove contaminated clothing immediately and wash before re-use. If irritation persists or there is any sign of skin damage, seek IMMEDIATE MEDICAL ASSISTANCE |
| Inhalation | Remove from exposure. |
| Ingestion | If conscious give plenty of water to drink. Do not induce vomiting. OBTAIN MEDICAL ATTENTION URGENTLY. |
| Personal protection for first aiders | Wear protective gloves / eye protection. |

4.2 Most important symptoms and effects, both acute & delayed.

No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed.

No further relevant information available.

Section 5. Fire Fighting

5.1 Extinguishing media

| | |
|---------------------|--|
| Extinguishing Media | Consider what other flammable materials are present and act accordingly. |
| Unsuitable Media | Nothing specified. |

5.2 Special hazards arising from the substance or mixture

| | |
|---------|-----------------------------------|
| Hazards | Presents no specific fire danger. |
|---------|-----------------------------------|

5.3 Advice for firefighters

| | |
|-------------------------|---|
| Advice for firefighters | Consider all other materials in the vicinity. |
|-------------------------|---|

Section 6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

| | |
|---------------------|---|
| Personal Protection | Use approved personal protective equipment. Evacuate area immediately. Do not allow other people to enter area. Do not allow general use of area until it is safe to do so. |
|---------------------|---|

6.2 Environmental precautions

| | |
|---------------|--|
| Environmental | Keep non-neutralised material out of sewers, storm drains, surface waters and soil. Notify the Environmental Agency and local Environmental Health Officer if major spillage occurs. |
|---------------|--|

6.3 Methods and material for containment and cleaning up

| | |
|----------------|--|
| Major Spillage | Neutralise spill with soda ash, lime, calcium carbonate or sodium bicarbonate. Wash area down with copious amounts of water. |
| Minor Spillage | Wash area down with copious amounts of water. |

6.4 Reference to other sections

See section 8.2 for information on protective equipment and section 13 for information on disposal.

Section 7. Storage & Handling

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Do not breath vapours. Do not allow to contaminate clothing.

Ensure Local Exhaust Ventilation maintains vapour concentrations to a minimum.

7.2 Conditions for safe storage, including any incompatibilities

Well ventilated, cool, dry storage .

7.3 Specific end use(s)

See section 1.2.

Section 8. Workplace Exposure & Personal Protection

8.1 Control parameters

| Component | CAS No | Concentration | Workplace Exposure Limits | |
|------------------|-----------|---------------|---------------------------|-------------------------|
| | | | Long Term (8hr TWA) | Short Term 15min period |
| Potassium iodide | 7681-11-0 | 20% | - | - |

Exposure data source(s) IOELV: Indicative Occupational Exposure Limit Value.

8.2 Exposure controls

| | |
|------------------------|---|
| Respiratory Protection | Use L.E.V. or natural ventilation to reduce vapour concentrations to a minimum. If not, use a well maintained chemical cartridge respirator, or use self contained breathing apparatus. |
| Hand Protection | Use nitrile gloves or PVC gauntlets. |
| Eye Protection | Use tightly fitting chemical splash proof glasses or goggles. |
| Skin Protection | If skin contact or contamination of clothing is likely, protective clothing must be worn. |
| Special Hazards | No special precautions required. |

Section 9. Physical & Chemical Properties

9.1 Information on basic physical and chemical properties

| | |
|-----------------------|------------------------------|
| Appearance | Clear colourless liquid. |
| Odour | Odourless. |
| pH | Not applicable |
| Boiling Point | ~100 °C |
| Melting Point | ~0 °C |
| Flash Point | Not applicable |
| Upper Flammable Limit | Not applicable |
| Lower Flammable Limit | Not applicable |
| Auto Ignition | Not applicable |
| Explosive Properties | No. |
| Oxidising Properties | No. |
| Vapour Pressure | Not applicable |
| Relative Density | 1.0508 |
| Water Solubility | Completely soluble in water. |

9.2 Other information

No data available.

Section 10. Stability & Reactivity

10.1 Reactivity No data available.

10.2 Chemical Stability Stable under normal conditions

| | | |
|-------------|------------------------------------|-------------------------|
| 10.3 | Possibility of hazardous reactions | No data available. |
| 10.4 | Conditions to Avoid | No specific conditions. |
| 10.5 | Incompatible Materials | Alkalis. |
| 10.6 | Hazardous Decomposition Products | None unusual. |

Section 11. Toxicological Information

11.1 Information on toxicological effects

| | |
|----------------------|--|
| Eyes | The liquid will be irritating to the eyes but unlikely to cause serious injury. |
| Skin | Repeated or prolonged contact may defat the skin producing irritation and dermatitis. |
| LD50 Skin | Not available |
| Ingestion | Low order of acute toxicity. Ingestion of large amounts will cause severe internal irritation and damage, nausea, vomiting, abdominal pains and diarrhoea. |
| LD50 Oral | Not available |
| Inhalation | High concentrations of vapour will produce irritation of the eyes, nose, throat and respiratory tract. |
| LD50 Inhalation | Not available |
| TCLo | Not available |
| Carcinogenicity | Not considered to be a carcinogen. |
| Mutagenicity | Not considered to be a mutagen. |
| Reproductive Effects | None identified. |

Section 12. Ecological

| | | |
|-------------|----------------------------------|---|
| 12.1 | Toxicity | Small amounts present no specific environmental hazard. Neutralised material presents no specific environmental hazard. |
| | LC50 Algal | Not available |
| | LC50 Crustacea | Not available |
| | LC50 Fish | Not 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 & vPvB assessment | Assessment not required. |
| 12.6 | Other adverse effects | None known at present. |

Section 13. Disposal Considerations

13.1 Waste treatment methods

| | |
|------------------------|---|
| Disposal Methods | Dilute in a large excess of water and carefully neutralise with soda ash, then wash to drain with copious amounts of water. |
| Contaminated Packaging | Wash out containers with water. Use a licensed waste disposer. |

Section 14. Transport Information

| | |
|--|----------------------------------|
| 14.1 UN Number | Non-restricted |
| 14.2 Proper Shipping Name | Non-restricted |
| 14.3 Transport classes | |
| UN classification | None |
| Subsidiary hazard(s) | None |
| Transport category | None |
| ADR Hazard ID | Non-restricted |
| Tunnel Restriction Code | Non-restricted |
| 14.4 Packing Group | None |
| 14.5 Environment hazards | See section 12. |
| 14.6 Special precautions for user | No special precautions required. |
| 14.7 Transport in bulk | Not transported in bulk. |

Section 15. Regulatory Information

15.1 Safety, health and environment regulations specific for substance/mixture.

Classification, Labeling & Packaging of Substances & Mixtures Regulations (1272/2008/CE)

Classification Spec target organ tox - repeat, category 1

Signal word Danger

Hazard Pictograms



Hazard Statements H372
Causes damage to organs through prolonged or repeated exposure.

Precautionary Statements P260, P264, P270, P314, P501
Do not breathe dust / fume / gas / mist / vapours / spray. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Get Medical advice/attention if you feel unwell. Dispose of contents / container to an approved waste disposal plant

15.2 Chemical safety assessment

Assessment not required.

Section 16. Other Information

The information contained in this document only covers the hazards presented by this material, it DOES NOT constitute a workplace risk assessment. See sections 11 for toxicological information and section 12 for ecological information.

Revision number: 2.0 (Supercedes revision 1.1)

Revision date: 08 February 2022

Reviewed by chemist: 08 February 2022

Printed date: 12 August 2023

Copyright: 2023 Vickers Laboratories Ltd