

# SAFETY DATA SHEET (SDS)



## Iodine/KI, 1.5%

Issue date: 15-09-2025

### Section 1: Product Identifier and Chemical Identity

| Product Identifier                                      |   |
|---|---|
| Product Name:   | Iodine/KI solution, 1.5%                              |
| Product Codes:  | MC26.1, MC26.2  |
| Other means of identification:                          |   |
| Chemical formula, alternative names:                    | KI <sub>3</sub> (aq)                                  |
| Recommended use of the chemical and restrictions on use |   |
| Recommended Use:  | For laboratory use only.                              |
| Suppliers name, address and phone number                |   |
| Supplier's Name:  | Southern Biological                                   |
| Supplier's ABN:   | 94 630 703 810  |
| Supplier's Address:                                     | 168 Fulham Road<br>Alphington Victoria 3078 Australia |
| Supplier's Phone No.:                                   | 1300 138 561  |
| Emergency Phone number (BH)                             | 1300 138 561  |

### Section 2: Hazard Identification

| Classification of the Hazardous Chemical |   |
|--|---|
| Hazard Category                          | Hazardous to the aquatic environment (acute) category 1<br>Acute toxicity (inhalation) category 4<br>Acute toxicity (oral) category 4   |
| Label elements                           |   |
| Hazard Pictograms:                       |  <br>environment exclamation mark |
| Signal Word:                             | Warning   |
| Hazard Statements:                       | Very toxic to aquatic life<br>Harmful if inhaled<br>Harmful in contact with skin  |
| Precautionary Statements:                | Use personal protective equipment. Ensure adequate ventilation. Avoid contact with skin, eyes and clothing. Do not ingest. Avoid release to the environment.  |
| Other Hazards                            |   |
| Results of PBT and vPvB assessment:      | PBT: Not applicable<br>VPvB: Not applicable   |

### Section 3: Composition/information on ingredients

| Ingredients      |           |            |
|------------------|-----------|------------|
| Name             | CAS       | Proportion |
| Water            | 7732-18-5 | Balance    |
| Potassium iodide | 7681-56-2 | 3%         |
| Iodine           | 7553-56-2 | 1.5%       |

### Section 4: First Aid Measures

| Necessary first aid measures  |   |
|---|---|
| After inhalation:   | Remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms; call a doctor.         |
| After skin contact:   | Wash with water and soap and rinse thoroughly. If skin irritation occurs: Get medical advice/ attention.                    |
| After eye contact:  | Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.        |
| After swallowing:   | Wash out mouth with water. Obtain emergency medical attention. Call a POISON CENTRE or doctor/physician if you feel unwell. |
| Medical attention and special treatment                                     |   |
| Indications of any immediate medical attention and special treatment needed | Treat symptomatically   |

### Section 5: Firefighting measures

| Extinguishing media                           |   |
|---|---|
| Suitable extinguishing equipment:             | Use dry chemical, CO <sub>2</sub> or appropriate foam   |
| Specific hazards arising from the chemical:   | Fire or excessive heat may produce iodine gas   |
| Advice for firefighters                       |   |
| Special protective equipment and precautions: | Do not enter the fire area without proper protective equipment including respiratory equipment. |

### Section 6: Accidental release measures

| General Information  |   |
|--|---|
| Personal precautions, protective equipment and emergency procedures: | No health effects expected from the clean-up of this material if contact can be avoided. Follow personal protective equipment recommendations found in Section 8 of this SDS. Prevent the spread of any spill to minimise harm to human health and the environment if safe to do so. Wear complete and proper personal protective equipment following the recommendation of Section 8 at a minimum. |
| Environmental precautions:   | Prevent entry to sewers and public waters. Avoid release to the environment. Notify authorities if spill to sewers or public waters.  |
| Methods and material for containment and cleaning up:                | Dispose of contaminating material as waste according to item 13. Ensure adequate ventilation.   |
| Reference to other sections:   | See Section 7 for information on safe handling.<br>See Section 8 for information on protective equipment.<br>See Section 13 for disposal information.   |

## Section 7: Handling and Storage

| General Information   |   |
|---|---|
| Precautions for safe handling:                                | <p>Ensure good ventilation/exhaustion at the workplace.</p> <p>Wash hands after use.</p> <p>Do not eat, drink or smoke when using this product.</p> <p>Wash contaminated clothing and protective equipment prior to entering eating area.</p> |
| Information about fire – and explosion protection:            | No special measures required.   |
| Conditions for safe storage, including any incompatibilities. |   |
| Storage:  | Store in cool dry area out of direct sunlight and incompatible materials. Keep containers closed when not in use. Store in suitably labelled containers.  |
| Requirements to be met by storerooms and receptacles:         | No special requirements.  |
| Information about storage in one common storage facility:     | Not required.   |
| Further information about storage conditions:                 | Keep container tightly sealed. Keep out of direct sunlight.   |

## Section 8: Exposure controls/personal protection.

| General information   |  |                                |          |
|---|--|--------------------------------|----------|
| Additional information about design of technical facilities:            |  | No further data: see section 7 |          |
| Control parameters:   |  |                                |          |
| Ingredients with limit values that require monitoring at the workplace: |  |                                |          |
| Name  | STEL   | TWA                            |          |
|   | mg/m³   ppm  | mg/m³   ppm                    | Footnote |
| Iodine  | n/a  | 1      0.1                     |          |
| Additional information  | These Workplace Exposure Standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept to as low a level as is workable. These workplace exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.<br><br>The STEL is an exposure value that should not be exceeded for more than 15 minutes and should not be repeated for more than 4 times per day. There should be at least 60 minutes between successive exposures at the STEL.<br><br>The exposure value at the TWA is the average airborne concentration of a particular substance when calculated over a normal 8 hour working day for a 5-day working week. |                                |          |
| Exposure Controls:  |  |                                |          |
| General protective and hygienic measures:                               | Use only in systems, processes and procedures in which effective ventilation has been provided.<br>Keep away from foodstuffs, beverages and feed.<br>Immediately remove all soiled and contaminated clothing<br>Wash hands before breaks and at the end of work.<br>Avoid contact with eyes.   |                                |          |
| Respiratory protection:   | In case of significant exposure use respiratory filter device. Not normally required.  |                                |          |
| Clothing / Foot-wear and equipment                                      | No special requirements.   |                                |          |
| Protection of hands:  | PVC or rubber gloves   |                                |          |
| Eye protection:   | Tightly sealed goggles   |                                |          |
| Skin protection:  | Laboratory Coat  |                                |          |

## Section 9: Physical and chemical properties

|  |  |
|--|--|
| Appearance:                              |  |
| Form:                                    | Liquid   |
| Colour:                                  | Dark brown   |
| Odour:                                   | Characteristic iodine                                    |
| Odour Threshold:                         | Not determined   |
| pH value:                                | 6.4  |
| Change in Condition:                     |  |
| Melting point/Melting range:             | 113.9°C  |
| Boiling point/Boiling range:             | 183.9°C  |
| Flash point:                             | Not determined   |
| Flammability (solid / gaseous)           | Not determined   |
| Ignition Temperature                     |  |
| Decomposition temperature:               | Not determined   |
| Self-igniting:                           | Not determined   |
| Danger of explosion:                     | Not determined   |
| Explosion limits                         |  |
| Lower:                                   | Not determined   |
| Upper:                                   | Not determined   |
| Vapour pressure:                         | 0.305 mmHg @ 25°C  |
| Density:                                 | Not determined   |
| General Info                             |  |
| Relative density:                        | Not determined   |
| Vapour density:                          | 8.8  |
| Evaporation rate:                        | Not determined   |
| Solubility in/ Miscibility with water:   | Miscible   |
| Partition coefficient (n-octanol/water): | Log Pow (potassium iodide) 0.04<br>Log Pow (iodine) 2.49 |
| Viscosity:                               | Not determined   |
| Other information:                       | Not determined   |

## Section 10: Stability and reactivity

| Reactivity  |   |
|---|---|
| General   | No further relevant information available.  |
| Chemical Stability                                |   |
| Thermal decomposition / conditions to be avoided: | No decomposition if used according to specifications.   |
| Possibility of hazardous reactions:               | No dangerous reactions known.   |
| Conditions to avoid:                              | Elevated temperatures, light  |
| Incompatible materials:                           | Water-reactive materials, strong oxidising agents, peroxides, metals (ferrous), acetaldehydes, rust, strong reducing agents, magnesium, sulphur, rubber, plastics, halogens |
| Hazardous decomposition products:                 | Iodine (gas)  |

## Section 11: Toxicological information

| Information on toxicological effects                       |  |                     |                      |
|--|--|---------------------|----------------------|
| Ingestion:   | Stomach pains, vomiting                      |                     |                      |
| Skin corrosion/irritation                                  | Dermatitis, allergies                        |                     |                      |
| Serious eye damage/irritation:                             | Allergies, iodism                            |                     |                      |
| Inhalation:  | Iodism                                       |                     |                      |
| Germ cell mutagenicity:                                    | No evidence of a mutagenic effect            |                     |                      |
| Carcinogenicity:   | Not listed as a carcinogen                   |                     |                      |
| Reproductive toxicity:                                     | No evidence of negative reproductive effects |                     |                      |
| Specific target organ toxicity (STOT) – single exposure:   | None known                                   |                     |                      |
| Specific target organ toxicity (STOT) – repeated exposure: | Thyroid                                      |                     |                      |
| Aspiration hazard:   | No information available                     |                     |                      |
| Toxicology data for the components:                        |  |                     |                      |
| Component  | LD50 oral                                    | LD50 dermal         | LC50 inhalation      |
| Potassium iodide   | 2779 mg/kg (rat)                             | > 2000 mg/kg (rat)  | No data              |
| Iodine   | 315 mg/kg (rat)                              | 1425 mg/kg (rabbit) | 4.588 mg/L 4hr (rat) |

## Section 12. Ecological information

| Ecotoxicity      |   |
|------------------|---|
| Potassium iodide | Freshwater fish (Oncorhynchus mykiss) LC50: 3200 mg/L 120hr   |
| Iodine           | Freshwater algae: EC50 = 0.13 mg/L 72hr<br>Freshwater fish: LC50 = 1.67 mg/K 96hr<br>Microtox: EC50 = 280 mg/L 3hr<br>Water flea: EC50 = 0.55 mg/L 48hr |

|                                    |   |
|------------------------------------|---|
| Persistence and degradability:     | Miscible with water. Persistence is unlikely based on information available |
| Behaviour in environmental systems |   |
| Bio-accumulative potential:        | No further relevant information available.                                  |
| Mobility in soil:                  | Will likely be mobile in the environment due to its water solubility        |
| Additional ecological information  |   |
| Results of PBT and vPvB assessment | PBT: Not applicable<br>vPvB: Not applicable                                 |
| Other adverse effects:             | No further relevant information available.                                  |

### Section 13. Disposal Considerations

|                               |   |
|-------------------------------|---|
| Waste treatment methods       |   |
| Recommendation                | Prevent this material from entering waterways, drains and sewers. Comply with official regulations. |
| Uncleaned packaging:          |   |
| Recommendation:               | Disposal must be made according to official regulations.  |
| Recommended cleansing agents: | Water, if necessary, together with cleansing agents.  |

### Section 14. Transport information

|         |  |
|---------|--|
| General | Not classified as a Dangerous Good according to the Australian Code for the Transport of Dangerous |
|---------|--|

### Section 15. Regulatory Information

|   |  |
|---|--|
| Safety health and environmental regulations/legislation specific for the substance or mixture |  |
| Australian Inventory of Chemical Substances:  | Substances are listed.                                 |
| Chemical safety assessment:   | A Chemical Safety Assessment has not been carried out. |

### Section 16. Other information

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.

- End of SDS -