

# MATERIAL SAFETY DATA SHEET

## SECTION 1 - IDENTIFICATION OF THE MATERIAL AND SUPPLIER

**Material Name:** Gram's iodine.  
**Catalogue Number:** AGI-500.  
**Other Names:** Iodine Mordant.  
**Recommended Use:** Used in hospital and pathology Microbiology laboratories for gram staining only.

**Supplier Name:** ProSciTech  
**Street Address:** 1/11 Carlton Street, Kirwan, Qld. 4817 Australia  
**Telephone Number:** (07) 4773 9444 **Fax Number:** (07) 4773 2244  
**Emergency Contact:** (07) 4773 9444 8:30am – 5:00pm, Monday to Friday

## SECTION 2 - HAZARDS IDENTIFICATION

**Hazard Classification:** Not classified as hazardous according to criteria of NOHSC.  
**Hazardous and/or Dangerous Nature:** NON-HAZARDOUS SUBSTANCE. NON-DANGEROUS GOODS.  
**Risk Phrases:** R20/21: Harmful by inhalation.  
R50: Very toxic to aquatic organisms.  
**Safety Phrases:** S2: Keep out of reach of children.  
S23: Do not breathe fumes.  
S25: Avoid contact with eyes.  
S61: Avoid release to the environment. Refer to special instructions/Material Safety Data Sheets.

## SECTION 3 - COMPOSITION / INFORMATION ON INGREDIENTS

**SUBSTANCE:** **Chemical Identity:** Gram's Iodine.  
**Common Name(s):** Iodine Mordant.  
**CAS Number(s):** -

### MIXTURE:

Ingredients	Cas Number(s)	Proportion (%)
Purified water	7732-18-5	>98
Iodine (below cut off)	7553-56-2	<1
Potassium Iodide	7681-11-0	<1

## SECTION 4 - FIRST AID MEASURES

**Swallowed:** If swallowed, DO NOT induce vomiting. If victim is conscious give water. If sickness persists transport to hospital or doctor.  
**Eye:** If material is splashed into eyes, immediately, flush with plenty of water for 15 minutes, ensuring eye lids are held open. If irritation persists transport to hospital or doctor.  
**Skin:** If material is splashed onto the skin, remove any contaminated clothing and wash skin thoroughly with water and soap if available. If irritation persists transport to hospital or doctor.  
**Inhaled:** Move victim to fresh air. Apply resuscitation if victim is not breathing, administer oxygen if breathing is difficult. Seek immediate medical attention

**First Aid Facilities:** Eyebath/eyewash & Safety shower.

### Medical Attention & Special Treatment:

Treat symptomatically.

ADDITIONAL INFORMATION:

## SECTION 5 - FIRE FIGHTING MEASURES

### Suitable Extinguishing Media:

Use extinguishing media suitable for surrounding fire situation. Material is not a flammable/combustible liquid.

### Hazards from Combustion Products:

Decomposes on heating emitting oxides of carbon.

### Precautions for Fire Fighters:

If safe to do so, move undamaged containers from fire area. Fire fighters to wear Self-contained breathing apparatus (SCBA) in confined spaces, in oxygen deficient atmospheres or if exposed to products of decomposition. Full protective clothing is also recommended.

**Hazchem Code:** 4X

## SECTION 6 - ACCIDENTAL RELEASE MEASURES

### Emergency Procedures:

#### Containment and clean up:

Material may be slippery when spilt. Walk cautiously. Ventilate area. Wear protective equipment to prevent skin and eye contact, as outlined under personal protection in this MSDS. Bund area using sand or soil - to prevent run off into drains and waterways. Use absorbent (soil, sand, vermiculite or other inert material). Collect and seal in properly labeled containers for disposal. Remainder of material can be washed to drain with plenty of water.

## SECTION 7 - HANDLING & STORAGE

### Precautions for Safe Handling:

Wear appropriate protective equipment and use in a well ventilated area (refer to Section 8). Wash thoroughly after handling, maintain workplace hygiene.

### Conditions for Safe Storage:

Store in a cool place and out of direct sunlight. Store away from sources of heat or ignition. Store away from oxidizing agents. Keep containers closed, when not using the product. Store in original packages as approved by manufacturer.

## SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

**National Exposure Standards:** Iodine (Below Cutoff): (Worksafe Australia)  
[TWA] 0.1 ppm 1 mg/m<sup>3</sup>  
[STEL] Peak limitation

Potassium Iodide: No Exposure standard allocated.

Water: No Exposure standard allocated.

**Biological Limit Values:** Iodine (Below Cutoff): (ACGIH)  
[STEL] 0.1 (Ceiling) 1.0 (Ceiling)

### Engineering Controls:

Maintain adequate ventilation at all times. In most circumstances natural ventilation systems are adequate unless the material is heated, reacted or otherwise changed in some type of chemical reaction, then the use of a local exhaust ventilation system is recommended.

### Personal Protective Equipment:

CLOTHING: PVC or natural rubber apron or splash suit.

GLOVES: PVC or natural rubber.

EYES: Chemical goggles or face shield to protect eyes.

RESPIRATORY PROTECTION: Avoid breathing of vapours/gases. Select and use respirators in accordance with AS/NZS 1715/1716. The use of a P1 dust mask (disposable) or with replaceable filters is recommended. Filter capacity and respirator type depends on exposure levels and type of contaminant. If entering spaces where the airborne concentration of a contaminant is unknown then the use of a Self-contained breathing apparatus (SCBA) with positive pressure air supply complying with AS/NZS 1715 / 1716, or any other acceptable International Standard is recommended.

## SECTION 9 - PHYSICAL & CHEMICAL PROPERTIES

**Appearance:** Light brown solution.  
**Odour:** Not available.  
**pH:** Not available.  
**Vapour pressure (mm of Hg at 25°C):** 23 hPa @ 20°C.  
**Vapour density:** Not available.  
**Boiling point/range (°C):** 100°C.  
**Freezing/melting point (°C):** 0°C.  
**Solubility:** Soluble in all proportions.  
**Specific gravity or density:** 1kg = 1L.  
**Flash Point:** Not applicable  
**Flammable (explosive) limits:** Not applicable  
**Ignition temperature:** Not available.

### Additional Information:

Iodine vapour can permeate plastic containers over time and stain shelving and adjacent products.

## SECTION 10 - STABILITY AND REACTIVITY

<b>Chemical stability:</b>	Stable under normal conditions of use.
<b>Conditions to avoid:</b>	Heat, flames, ignition sources and incompatible materials.
<b>Incompatible Materials:</b>	Strong alkalis, acids, oxidizing agents.
<b>Hazardous Decomposition Products:</b>	Emits smoke and fumes when heated to decomposition.
<b>Hazardous Reactions:</b>	Will not occur.

## SECTION 11 - TOXICOLOGICAL INFORMATION

### Exposure and Health Effects:

#### Ingestion:

May cause irritation to mouth, throat and stomach with effects including mucous build up, irritation to the tongue and lips and pains in the stomach.

#### Inhalation:

May cause irritation to the nose, throat and respiratory system with effects including: Dizziness, headache and possible confusion.

#### Skin Contact:

May cause irritation to the skin, with effects including; Redness and itchiness.

#### Eye Contact:

May cause irritation to the eyes, with effects including: tearing, pain, stinging and blurred vision.

**Human/Animal data:** Not available.

**Carcinogenicity:** Not available.

## SECTION 12 – ECOLOGICAL INFORMATION

**Ecotoxicity:** Very toxic to aquatic organisms, no further data found.

**Persistence and degradability:** Not available.

**Mobility:** Not available.

### Additional Information:

## SECTION 13 - DISPOSAL CONSIDERATIONS

### Disposal Methods:

Refer to appropriate authority in your State. Dispose of material through a licensed waste contractor. Advise flammable nature. Normally suitable for disposal by approved waste disposal agent.

### Special Precautions:

## SECTION 14 - TRANSPORT INFORMATION

**UN Number:** Not regulated.

**UN Proper Shipping Name:** Not regulated.

**Class and Subsidiary risk:** Not regulated.

**Packing Group:** Not regulated.

**Special Precautions for User:** Not available

**Hazchem Code:** 4X

## SECTION 15 - REGULATORY INFORMATION

**Poison Schedule Number:** None allocated.

## SECTION 16 - OTHER INFORMATION

Date of preparation of MSDS: August 10

Comments:

*The information published in this Material Safety Data Sheet has been compiled from data in various technical publications. It is the user's responsibility to determine the suitability of this information for adoption of necessary safety precautions. We reserve the right to revise material Safety Data Sheets as new information becomes available. Copies may be made for non-profit use.*