AuSaMicS™ Life Science

Safety Data Sheet

SDS-AS-1151

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Prepared in accordance with Australian WHS Regulations 2017 & GHS (7th Revision) | Issue Date: March 2026 | Rev: 1.0

Section 1 — Identification

Product Name	Brilliant Green Bile Agar (BGBA)
Other Names	BGBA; Brilliant Green Bile Agar; Kauffmann-Kristensen Medium
Catalog No.	AS-1151
Intended Use	Highly selective Salmonella culture medium — for laboratory use only
Supplier	AuSaMicS Pty Ltd, 31 Longview CT, Thomastown VIC 3074, Australia
ABN	56 676 640 467
Phone	+61 412 520 598
Email / Web	support@ausamics.com / www.ausamics.com.au
Emergency (24h)	Poisons Information Centre: 13 11 26 (Australia)

Section 2 — Hazard Identification

GHS Classification	Mixture not classified as hazardous under GHS / WHS Regulations 2017 for base components. Brilliant green (CAS 633-03-4): H341 suspected mutagen Cat.2 — at 4.7 mg/L in prepared medium: very low exposure risk.
Signal Word	Warning (brilliant green component)
Hazard Statements	H341: Suspected of causing genetic defects (brilliant green — Cat.2, at concentrated doses). H315: Skin irritation. H319: Eye irritation (bile salts).
Precautionary Stmts.	P201 · P260 · P264 · P270 · P280 · P308+P313 · P501
Pictograms	GHS07 (Exclamation mark); GHS08 (Health hazard) — precautionary for brilliant green
Biological Hazard	Salmonella = Risk Group 2 organism — PC2 containment required for all culture work. Brilliant green stains skin/surfaces intensely.

Section 3 — Composition / Information on Ingredients

Component	CAS No.	Proportion (w/w)	GHS Classification
Agar (bacteriological)	9002-18-0	~27.2%	Not classified
Ox Bile (dried)	8008-63-7	~36.3%	Not classified (bile salts — potential irritant)
Peptone	—	~18.1%	Not classified
Meat Extract	—	~9.1%	Not classified
Sodium Chloride	7647-14-5	~9.1%	Not classified
Phenol Red	143-74-8	~0.16%	Not classified at supplied concentration
Brilliant Green	633-03-4	~0.009%	H341 (susp. mutagen Cat.2) — at 4.7 mg/L prepared: negligible exposure risk

Section 4 — First Aid Measures

Inhalation	Remove to fresh air. If respiratory irritation from dust persists, seek medical advice.
Skin Contact	Wash thoroughly with soap and water. Brilliant green stains skin green/turquoise (fades over days). Bile salts may cause irritation. Seek advice if irritation persists.
Eye Contact	Rinse immediately with copious water for at least 15 minutes, holding eyelids open. Seek medical attention — bile salts and brilliant green may cause eye irritation.
Ingestion	Do not induce vomiting. Rinse mouth. Seek medical advice. Show SDS to physician.
Medical Note	Brilliant green: document any significant exposure (mutagenicity concern). Ox bile: may cause GI upset on ingestion.

Section 5 — Fire-Fighting Measures

Flash Point	Not applicable (non-flammable powder)
Extinguishing Media	CO2, dry chemical, or water spray
Hazardous Products	CO, CO2, NOx, SOx on combustion

Fire-Fighting PPE	SCBA in enclosed spaces

Section 6 — Accidental Release Measures

Personal Precautions	Avoid dust. Wear gloves and eye protection. Brilliant green stains intensely. Ventilate area.
Environmental	Prevent entry to drains or waterways. Brilliant green is toxic to aquatic organisms.
Clean-up (dry)	Carefully vacuum (HEPA) or damp wipe. Collect in sealed container. Dispose per Section 13.
Biological Spill	BIOHAZARD if inoculated: apply 1% hypochlorite (30 min contact), autoclave all waste. Report per institutional biosafety policy.

Section 7 — Handling and Storage

Handling	Well-ventilated area. Wear gloves and eye protection. Avoid dust. Brilliant green stains clothing and surfaces intensely. PC2 containment for all Salmonella culture work.
Sterilisation	BOILING ONLY — DO NOT AUTOCLAVE. Autoclave destroys selectivity.
Storage — Dehydrated	Below 25 °C, dry, protected from light and moisture
Storage — Prepared	2–8 °C, protected from light — use within 7 days of preparation
Incompatibles	Strong oxidising agents (bleach) decolourise brilliant green; strong acids/bases; reducing agents

Section 8 — Exposure Controls / Personal Protection

OEL (Safe Work Australia)	Brilliant green: no WES — apply ALARA (mutagenicity). Ox bile: no WES.
Engineering Controls	Local exhaust ventilation when weighing; Class II BSC for all Salmonella culture work
Respiratory	P2 dust mask when generating powder dust
Hand Protection	Nitrile gloves — brilliant green stains intensely; double-glove for culture work
Eye / Face	Safety glasses; goggles if splash risk

Body Protection	Dedicated lab coat; closed footwear; consider impermeable apron
Biosafety	Salmonella: Risk Group 2 per AS/NZS 2243.3:2010 — PC2 containment required

Section 9 — Physical and Chemical Properties

Property	Value
Physical State (25 °C)	Solid (powder)
Colour	Light beige to pale yellow-green (brilliant green tint)
Odour	Faint, characteristic (peptone/bile)
pH (prepared, 25 °C)	7.2 ± 0.2
Melting / Solidification	Gels ~32–34 °C / Melts ~84–86 °C (agar)
Flash Point	Not applicable
Vapour Pressure	Negligible
Solubility	55.1 g/L in purified water on boiling
Explosive / Oxidising	Not explosive; not oxidising

Section 10 — Stability and Reactivity

Stability	Stable under recommended conditions. Brilliant green degrades on autoclaving and UV exposure.
Conditions to Avoid	Autoclaving (destroys selectivity); strong oxidising agents; UV light; moisture; heat > 40 °C
Materials to Avoid	Strong oxidising agents (bleach, permanganate) decolourise brilliant green; strong acids/bases; reducing agents
Hazardous Decomposition	CO, CO2, NOx, SOx on combustion

Section 11 — Toxicological Information

Acute Oral Toxicity	Low for base medium; ox bile may cause GI upset on ingestion

Skin Irritation	H315 — ox bile and brilliant green may cause skin irritation; brilliant green stains intensely
Eye Irritation	H319 — bile salts and brilliant green cause serious eye irritation; rinse immediately
Mutagenicity	Brilliant green (CAS 633-03-4): H341 — suspected of causing genetic defects (Cat.2). At supplied concentration (4.7 mg/L prepared / ~0.009% w/w powder) — exposure risk very low; apply ALARA.
Carcinogenicity	Not classified at supplied concentrations
Reproductive Toxicity	Not classified
Biological Hazard	Salmonella cultures in this medium: Risk Group 2 — potentially pathogenic. PC2 containment mandatory.

Section 12 — Ecological Information

Aquatic Toxicity	Brilliant green is toxic to aquatic organisms at low concentrations — prevent any release to waterways
Biodegradability	Bile, peptones, agar: biodegradable. Brilliant green: limited biodegradability — treat as persistent
Bioaccumulation	Brilliant green may bioaccumulate in aquatic organisms
PBT / vPvB	Not assessed; brilliant green: potential aquatic toxicity concern

Section 13 — Disposal Considerations

Waste Classification	Treat as hazardous laboratory waste (brilliant green mutagenicity concern + potential Salmonella content)
Prepared Medium (used)	Autoclave 121 °C / 30 min or treat with 1% hypochlorite (30 min contact) before disposal as clinical/biohazardous waste
Prepared Medium (unused)	Autoclave before disposal; dispose via licensed waste contractor
Dehydrated Powder	Dispose as hazardous chemical waste via licensed contractor (brilliant green content)
Containers	Decontaminate before disposal; do not reuse for food or beverage

Section 14 — Transport Information

UN Number (base powder)	Not regulated as dangerous goods in standard quantities
UN Number (cultures)	UN 3373 Biological Substance Category B (if containing Salmonella cultures)
ADG (Australia)	Not classified for powder
IATA / ICAO (cultures)	IATA P650 packing instructions for Category B biological substances

Section 15 — Regulatory Information

AICS (Australia)	All components listed on Australian Inventory of Chemical Substances
SUSMP Schedule	Not scheduled for laboratory use
WHS Regulations	Contains hazardous chemical (brilliant green H341) — WHS Regulations 2017 apply
Biosafety	Salmonella: Risk Group 2 per AS/NZS 2243.3:2010 — PC2 containment required
HS Tariff Code	3821.00.00 — Prepared culture media
REACH (EU)	Components comply with REACH Regulation (EC) No. 1907/2006

Section 16 — Other Information

SDS Prepared By	AuSaMicS Pty Ltd — Technical & Quality Department
Issue Date	March 2026 · Rev 1.0
Review Date	March 2027 or upon regulatory change
Key References	Safe Work Australia; GHS 7th Rev.; AS/NZS 2243.3:2010; WHS Regulations 2017; ISO 6579-1:2017