SAFETY DATA SHEET

SDS-AS-1154-v1

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GHS Compliant — Safe Work Australia (Australian WHS Regulations) | Issue Date: April 2026 | Version 1.0

SECTION 1 — Identification

Product Name	Bromocresol Purple Azide Broth
Catalogue No.	AS-1154
Synonyms	BCP Azide Broth; Bromocresol Purple Glucose Azide Broth; Faecal Streptococcus Broth
Supplier	AuSaMicS Pty Ltd
Address	31 Longview CT, Thomastown VIC 3074, Australia
ABN	56 676 640 467
Website	www.ausamics.com.au
Email	support@ausamics.com.au
Phone	+61 412 520 598
Emergency Contact	Poisons Information Centre: 13 11 26	CHEMWATCH: 1800 039 008
Recommended Use	Selective microbiological culture medium — laboratory professional use only
Restrictions on Use	Not for human consumption or therapeutic use

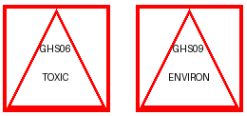
SECTION 2 — Hazard Identification

GHS Classification (based on key hazardous ingredient: Sodium Azide, CAS 26628-22-8):

- Acute Toxicity (Oral) — Category 2: H300 Fatal if swallowed
- Acute Toxicity (Dermal) — Category 3: H311 Toxic in contact with skin
- Acute Toxicity (Inhalation, dust/mist) — Category 2: H330 Fatal if inhaled
- Hazardous to Aquatic Environment (Chronic) — Category 1: H410 Very toxic to aquatic life with long lasting effects

Signal Word: DANGER

GHS Pictograms:



GHS06 — Skull & Crossbones (Acute Toxicity) GHS09 — Environment (Aquatic Hazard)

Hazard Statements:

H300: Fatal if swallowed | H311: Toxic in contact with skin | H330: Fatal if inhaled | H410: Very toxic to aquatic life with long lasting effects

Precautionary Statements:

P260: Do not breathe dust/fumes. P264: Wash hands thoroughly after handling. P270: Do not eat, drink or smoke when using this product. P271: Use only in a well-ventilated area. P273: Avoid release to the environment. P280: Wear protective gloves/eye protection. P301+P310: IF SWALLOWED: Immediately call POISON CENTER/doctor.

P302+P352: IF ON SKIN: Wash with plenty of water. P304+P340: IF INHALED: Remove to fresh air. P391: Collect spillage. P501: Dispose in accordance with local regulations.

SECTION 3 — Composition / Information on Ingredients

Ingredient	CAS No.	% w/w (approx.)	GHS Classification
Tryptose	91079-38-8	68.7%	Not classified
Yeast Extract	8013-01-2	17.2%	Not classified
Dextrose (D-Glucose)	50-99-7	3.4%	Not classified
K_2HPO_4	7758-11-4	9.3%	Not classified
Bromocresol Purple	115-40-2	0.05%	Not classified at this concentration
Sodium Azide (NaN_3)	26628-22-8	1.4%	Acute Tox. 2 (Oral/Inh.); Tox. 3 (Dermal); Aquatic Chron. 1

SECTION 4 — First-Aid Measures

Ingestion	DO NOT induce vomiting. Rinse mouth with water. Call Poisons Information Centre (13 11 26) or doctor immediately. If conscious, give 200–300 mL water.
Skin Contact	Remove contaminated clothing immediately. Wash skin with soap and copious water for at least 15 minutes. Seek medical attention if irritation persists.
Eye Contact	Irrigate eyes with clean running water for at least 15 minutes, holding eyelids open. Seek immediate medical attention.
Inhalation	Remove person to fresh air. If breathing is difficult, administer oxygen. Apply artificial respiration if needed. Call emergency services. Seek immediate medical attention.
Medical Notes	Sodium azide poisoning inhibits cytochrome oxidase. Treat symptomatically. Supportive care; no specific antidote.

SECTION 5 — Fire-Fighting Measures

Flammability	Dry powder: not flammable under normal conditions
Extinguishing Media	Water spray, dry chemical, CO_2, foam. Do not use water jet.
Special Hazards	Sodium azide decomposes to sodium oxide and nitrogen gas on heating. Reaction with acids releases toxic hydrazoic acid (HN_3). Metal azides may form in drain pipes and explode on shock.
Protective Equipment	Self-contained breathing apparatus (SCBA) and full protective clothing when fighting fires involving this material.

SECTION 6 — Accidental Release Measures

Personal Precautions: Wear full PPE (gloves, lab coat, eye protection, dust mask if powder spill). Ensure adequate ventilation. Avoid skin and eye contact.

Environmental Precautions: Prevent entry into drains, sewers, waterways, and soil. Azide is highly toxic to aquatic organisms at very low concentrations.

Clean-Up: Contain spill. Collect solid with a damp cloth or inert absorbent. Transfer to sealed plastic waste container labelled "Azide Waste". Treat with 10% sodium hypochlorite or ferric chloride before disposal. Wash contaminated area with water.

SECTION 7 — Handling and Storage

Handling	Use in well-ventilated laboratory. Avoid contact with acids. Do not pipette by mouth. Wash hands thoroughly after handling. Avoid release to environment. Do not dispose of azide waste directly to metal drains.
Storage	Store at 10–30 °C in a cool, dry, well-ventilated location. Keep container tightly sealed. Store away from acids and oxidising agents. Keep out of reach of children.
Incompatibilities	Acids (release toxic HN_3 gas). Heavy metals — form explosive metal azides. Strong oxidising agents.

SECTION 8 — Exposure Controls / Personal Protection

Occupational Exposure Limit	No specific WES established in Australia for sodium azide. Apply precautionary principle; minimise exposure.
Engineering Controls	Use in well-ventilated laboratory or fume hood when handling large quantities or generating dust.
Hand Protection	Nitrile rubber gloves (minimum 0.2 mm thickness)
Eye / Face Protection	Safety spectacles or chemical goggles; face shield if splash risk
Body Protection	Laboratory coat and long sleeves; impervious protective clothing for large quantities
Respiratory Protection	Good laboratory ventilation sufficient for normal use; P2/P3 dust respirator if dust generation cannot be controlled
Hygiene	Wash hands and exposed skin before breaks and after work. Do not eat or drink in areas of use.

SECTION 9 — Physical and Chemical Properties

Appearance (Powder)	Fine powder; light beige to grey
Appearance (Prepared Broth)	Clear to slightly opalescent; purple to blue-purple
Odour	Faint, characteristic
pH (Prepared, 25 °C)	6.8 ± 0.2
Solubility	Soluble in water
Melting Point	Not applicable (mixture)
Flash Point	Not applicable
Vapour Pressure	Not applicable (solid powder)

SECTION 10 — Stability and Reactivity

Stability	Stable under recommended storage conditions
Conditions to Avoid	Heat above 150 °C, moisture, strong acids, strong oxidising agents
Materials to Avoid	Acids (HCl, H_2SO_4) — generate toxic HN_3. Heavy metals (Cu, Pb, Ag) — form explosive azide salts. Strong oxidisers.
Hazardous Decomposition Products	On heating: sodium oxide, nitrogen gas. With acids: hydrazoic acid (HN_3) — toxic and flammable. With heavy metals: explosive metal azides.
Hazardous Polymerisation	Will not occur

SECTION 11 — Toxicological Information

Acute Oral Toxicity (NaN_3)	LD_{50} (rat): 27 mg/kg — Category 2 (Fatal if swallowed)
Acute Dermal Toxicity (NaN_3)	LD_{50} (rat): 20 mg/kg — Category 3 (Toxic in contact with skin)
Acute Inhalation Toxicity (NaN_3)	LC_{50} (rat, 1h): 37 mg/m³ — Category 2 (Fatal if inhaled)
Skin Irritation	Not classified as irritant at product concentrations
Eye Irritation	Not classified as irritant at product concentrations
Sensitisation	No data indicating sensitisation potential for this mixture
Carcinogenicity	No components listed as IARC Group 1 or 2A carcinogens
Mechanism of Toxicity	NaN_3 inhibits cytochrome c oxidase (Complex IV), blocking mitochondrial electron transport chain, leading to cellular hypoxia

SECTION 12 — Ecological Information

Aquatic Toxicity (NaN_3)	LC_{50} (fish, 96h): < 1 mg/L — Very toxic to aquatic life with long lasting effects (H410)
Ecotoxicity	Sodium azide is acutely toxic to aquatic organisms at very low concentrations. Prevent any release to water bodies or soil.
Persistence	Azide ions degrade under aerobic conditions; however rate is slow in soil and water.
Bioaccumulation	Low bioaccumulative potential expected
Mobility in Soil	Azide anion is mobile in soil; risk of groundwater contamination if released

SECTION 13 — Disposal Considerations

Azide Deactivation: Before disposal, treat azide-containing solutions with one of the following:

- 10% w/v sodium hypochlorite (bleach) solution (excess); stir and allow to react for at least 24 hours, OR

- Ferric chloride ($FeCl_3$) solution — forms insoluble ferric azide which can be filtered and safely disposed.

Dispose of treated waste in accordance with relevant State/Territory EPA regulations. Do not dispose of untreated azide waste to municipal drain or environment. Container Disposal: Triple-rinse containers, dispose per local council regulations.

SECTION 14 — Transport Information

UN Number	UN1687 (for sodium azide component)
Proper Shipping Name	Sodium azide (component)
Hazard Class	Class 6.1 — Toxic substances
Packing Group	II
ADG (Road/Rail, AU)	Class 6.1 Toxic. Consult ADG Code 7.7 for packaging requirements.
IATA (Air)	Restricted article; refer to current IATA Dangerous Goods Regulations (DGR).
IMDG (Sea)	Class 6.1; refer to current IMDG Code.
Note	As a laboratory reagent in small quantities (≤500 g), limited quantity exemptions may apply. Consult freight carrier.

SECTION 15 — Regulatory Information

AICIS (Australia)	All ingredients are listed or exempt under the Australian Industrial Chemicals Introduction Scheme (AICIS).
Safe Work Australia	WHS Regulations apply. This SDS complies with Australian Code for the Transport of Dangerous Goods.
Poisons Standard	Sodium azide is subject to scheduling under the Therapeutic Goods Act 1989 / SUSMP.
State/Territory Regs	Users must comply with applicable state/territory WHS legislation and EPA regulations for storage and disposal.

SECTION 16 — Other Information

Issue Date	April 2026
Version	1.0
Prepared By	AuSaMicS Pty Ltd — Technical Directorate
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Key Sources	Safe Work Australia GHS 7th Revision; Merck Index; ECHA C&L Inventory; NIST WebBook; Sigma-Aldrich SDS
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