SECTION 1 — Identification of the Substance/Mixture and of the Company/Undertaking

Product name	TBX Agar (Tryptone Bile X-glucuronide Agar)
Catalogue number	AS-1427
Intended use	Selective chromogenic culture medium for detection of Escherichia coli in food, water, and environmental samples. For laboratory and research use only.
Supplier	AuSaMicS Pty Ltd
Address	31 Longview CT, Thomastown VIC 3074, Australia
ABN	56 676 640 467
Phone	+61 412 520 598
Email	support@ausamics.com
Website	www.ausamics.com.au
Emergency contact	Poisons Information Centre: 13 11 26 (Australia, 24 hrs)

SECTION 2 — Hazard Identification

GHS Classification: Not classified as a hazardous substance or dangerous good under Australian WHS Regulations (Safe Work Australia) or the GHS (7th Revised Edition).

Signal Word: None required.
Hazard Pictograms: None applicable.
Hazard Statements: None applicable.
Precautionary Statements: As a general laboratory precaution, avoid inhalation of dust; use standard laboratory PPE.

Note: Although TBX Agar is not classified as hazardous, it is a microbiological culture medium. Prepared medium inoculated with biological samples may contain pathogenic microorganisms. Standard laboratory biosafety procedures must be followed at all times.

SECTION 3 — Composition / Information on Ingredients

Component	CAS Number	Concentration (g/L)	Hazard Classification
Peptones (Tryptone)	73049-73-7 (mixture)	20.0	Not classified
Bile Salts No. 1	Mixture	1.5	Not classified at use concentration
X-beta-D-glucuronide	97753-82-7	0.075	Not classified at use concentration
Agar	9002-18-0	15.0	Not classified

SECTION 4 — First Aid Measures

Route of Exposure	First Aid Action
Inhalation (powder dust)	Remove to fresh air. If symptoms persist, seek medical attention.
Skin contact	Wash affected area thoroughly with soap and water. Remove contaminated clothing. Seek medical attention if irritation persists.
Eye contact	Immediately flush eyes with large amounts of water for at least 15 minutes. Seek medical attention if irritation persists.
Ingestion	Rinse mouth with water. Do not induce vomiting. Seek medical attention. Show this SDS to the attending physician.

SECTION 5 — Fire-Fighting Measures

- Not flammable under normal conditions of use.
- Suitable extinguishing media: Use extinguishing agents appropriate for surrounding fire (CO2, dry chemical, foam, water spray).
- Hazardous combustion products: Carbon dioxide (CO2), carbon monoxide (CO), nitrogen oxides (NOx) upon combustion.
- Special protective equipment for fire-fighters: Self-contained breathing apparatus (SCBA) recommended in confined spaces.

SECTION 6 — Accidental Release Measures

- Personal precautions: Wear appropriate PPE (gloves, safety glasses, dust mask if handling large quantities of powder). Avoid inhalation of dust.
- Environmental precautions: Avoid large-scale release to drains, waterways, or soil. Minor spills in laboratory setting pose minimal environmental risk.
- Spill clean-up (powder): Sweep or vacuum carefully to avoid dust generation. Collect in a labelled, sealable container for disposal.
- Spill clean-up (prepared medium): Absorb with inert material (e.g. sand, vermiculite). Collect and dispose in accordance with local EPA regulations.

SECTION 7 — Handling and Storage

Handling:

- Use in a well-ventilated laboratory environment.
- Avoid inhalation of powder dust during weighing and reconstitution.
- Wear appropriate PPE: nitrile gloves, safety spectacles, laboratory coat.
- Wash hands thoroughly after handling.
- Do not eat, drink, or smoke in areas where this product is handled.

Storage:

- Store at 15–25°C in a dry location, away from heat, direct sunlight, and moisture.
- Keep container tightly sealed when not in use.
- Do not store near strong oxidising agents, acids, or bases.
- Shelf life: As stated on label. Refer to COA for batch-specific expiry date.

SECTION 8 — Exposure Controls / Personal Protection

PPE Type	Recommendation
Respiratory protection	Not required under normal conditions. A P1/P2 dust mask is recommended if handling large quantities of powder or if local ventilation is inadequate.

PPE Type	Recommendation
Hand protection	Nitrile or latex gloves. Replace immediately if contaminated or damaged.
Eye protection	Safety spectacles or chemical splash goggles when handling powder or reconstituted medium.
Skin and body protection	Laboratory coat and closed-toe shoes. Wash contaminated clothing before reuse.
Engineering controls	Handle in a well-ventilated area. Local exhaust ventilation (LEV) recommended when handling powder in quantity.
Occupational exposure limits	No specific OEL established for this product under Australian WHS Regulations. Apply general laboratory dust limits (inhalable dust: 10 mg/m3; respirable dust: 3 mg/m3).

SECTION 9 — Physical and Chemical Properties

Property	Value
Physical form	Powder (dehydrated)
Colour	Beige to cream
Odour	Faint, characteristic
pH (prepared medium, 25°C)	7.2 ± 0.2
Solubility	Dispersible in boiling water; reconstituted at 36.6 g/L
Boiling point	Not applicable (solid/powder)
Melting point	Not applicable
Flammability	Not flammable
Explosive properties	Not explosive
Oxidising properties	Not oxidising

SECTION 10 — Stability and Reactivity

- Chemical stability: Stable under recommended storage conditions (15–25°C, dry, sealed).
- Conditions to avoid: Excessive heat (>40°C), high humidity, direct sunlight, moisture.
- Incompatible materials: Strong oxidising agents, strong acids, strong bases — avoid contact.
- Hazardous decomposition products: Carbon dioxide (CO2), carbon monoxide (CO), and nitrogen oxides (NOx) upon thermal decomposition at elevated temperatures.
- Possibility of hazardous reactions: None known under normal conditions of use.

SECTION 11 — Toxicological Information

- Acute toxicity (oral): No specific data available. Based on component composition, not expected to be acutely toxic at typical laboratory use concentrations.
- Skin irritation: Not expected to cause significant skin irritation under normal use conditions.
- Eye irritation: Powder may cause mild mechanical eye irritation. Not expected to be a corrosive eye hazard.
- Respiratory effects: Inhalation of dust may cause mild irritation of the mucous membranes. Avoid dust generation.
- Carcinogenicity / mutagenicity / reproductive toxicity: No evidence for carcinogenic, mutagenic, or reproductive toxic effects at typical laboratory use levels.

- Chronic effects: No chronic health effects anticipated from normal laboratory handling.

SECTION 12 — Ecological Information

- Ecotoxicity: Not expected to be harmful to aquatic or terrestrial organisms at typical laboratory use quantities.
- Persistence and degradability: The organic components (tryptone, agar) are biodegradable.
- Bioaccumulation potential: Not expected to bioaccumulate in the environment.
- Mobility in soil: Low — components are not expected to leach significantly into groundwater from laboratory quantities.
- Environmental precautions: Avoid large-scale discharge to drains, waterways, or soil. Micro-scale laboratory spills pose minimal environmental risk.

SECTION 13 — Disposal Considerations

- Prepared medium containing viable microbiological cultures must be autoclaved (121°C, 15 min, 15 psi) prior to disposal.
- Autoclaved material may be disposed of via standard laboratory drain (prepared medium) or solid laboratory waste stream (solidified agar).
- Unused, unopened product: Dispose as non-hazardous solid waste in accordance with local council and State EPA regulations (VIC: EPA Victoria).
- Do not dispose of in the environment or as household waste.
- Contaminated containers: Rinse, autoclave if biologically contaminated, and dispose as laboratory solid waste.

SECTION 14 — Transport Information

Classification System	Status
ADG (Australian Dangerous Goods Code)	Not classified as a dangerous good
IATA (Air transport)	Not classified as a dangerous good
IMDG (Sea transport)	Not classified as a dangerous good
UN Number	Not applicable
Packing Group	Not applicable
Special transport precautions	Store upright; protect from moisture and excessive heat during transport.

SECTION 15 — Regulatory Information

- This product is subject to Australian WHS Regulations (Safe Work Australia, Model WHS Regulations 2011, as amended).
- Classified and labelled in accordance with the Globally Harmonized System of Classification and Labelling of Chemicals (GHS), 7th Revised Edition.
- This product is not listed on the Australian Inventory of Chemical Substances (AICS) as a scheduled hazardous substance.
- HS Code: 3821.00.00 (Prepared culture media for development of micro-organisms).
- For laboratory and research use only. Not approved for use as a food additive, pharmaceutical ingredient, or veterinary product.

SECTION 16 — Other Information

SDS Document Number	SDS-AS-1427-TBX
GHS Revision	7th Revised Edition (UN, 2017)
Australian Standard	Safe Work Australia, Model WHS Regulations 2011
Issue Date	January 2026
Prepared by	Hassan Salimi, Founder & Technical Director, AuSaMicS Pty Ltd
Next review date	January 2028 (or upon significant formulation change)

Abbreviations: ADG = Australian Dangerous Goods Code; GHS = Globally Harmonized System; WHS = Work Health and Safety; PPE = Personal Protective Equipment; LEV = Local Exhaust Ventilation; OEL = Occupational Exposure Limit; AICS = Australian Inventory of Chemical Substances; GUD = beta-glucuronidase; ISO = International Organisation for Standardisation.

DISCLAIMER: The information in this Safety Data Sheet is provided in good faith and is based on data believed to be accurate as of the issue date. AuSaMicS Pty Ltd makes no warranty, express or implied, with respect to the information and accepts no liability for errors or omissions. Users are responsible for verifying the suitability of this product for their specific application and for complying with all applicable legislation. This SDS is prepared in accordance with Safe Work Australia requirements and the GHS (7th Revised Edition).