AuSaMicS™ Life Science

SDS
AS-1438
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Safety Data Sheet

ECC Agar — E. coli & Coliform Chromogenic Agar | Cat. No. AS-1438 | GHS 7th Edition / WHS Regulations 2023 (Australia)

Section 1 — Identification

Product Name	ECC Agar — *E. coli* & Coliform Chromogenic Agar
Catalogue No.	AS-1438
Synonyms	ECC Agar; *E. coli* Coliform Detection Medium
Recommended Use	Selective differential chromogenic culture medium for detection and enumeration of *E. coli* and total coliforms. Laboratory use only.
Restrictions on Use	Not for food, therapeutic, veterinary, or direct human/animal use
Supplier	AuSaMicS Pty Ltd | ABN 56 676 640 467
Address	36/25 Trafalgar Road, Epping, VIC 3076, Australia
Telephone	+61 412 520 598
Email	support@ausamics.com
Emergency Telephone	Poisons Information Centre: 13 11 26 (24 hours, Australia-wide)

Section 2 — Hazard(s) Identification

Not classified as a hazardous substance or dangerous good under the Australian WHS (Hazardous Chemicals) Regulations 2023 or the GHS 7th Edition when used as intended. As a fine dehydrated powder, bulk handling may generate dust that is mechanically irritating to the respiratory tract and eyes; a precautionary GHS07 classification is applied for dust exposure during weighing and handling. Ethanol is used during manufacture as a processing aid (to incorporate Magenta-GAL) and is fully evaporated before packaging; it is not a declared ingredient of the finished product, but is noted here (H225 — highly flammable liquid and vapour) as a manufacturing process hazard.

Signal Word	Warning (dust-handling precaution only)
Hazard Statement	H335 — May cause respiratory irritation (precautionary; bulk powder handling)
Precautionary Statements	P261 — Avoid breathing dust. P271 — Use only outdoors or in a well-ventilated area. P304+P340 — IF INHALED: remove to fresh air and keep at rest in a position comfortable for breathing. P312 — Call a POISON CENTER/doctor if you feel unwell.

Other Hazards — Combustible organic powder — avoid conditions that generate dust clouds near ignition sources. Not a PBT or vPvB substance.

Section 3 — Composition / Information on Ingredients

Component	g/L (approx.)	CAS No.	Classification
Peptone	10.0	73049-73-7	Not classified
D-Sorbitol	1.0	50-70-4	Not classified
Sodium chloride	5.0	7647-14-5	Not classified
Dipotassium hydrogen phosphate (K_2HPO_4)	2.7	7758-11-4	Not classified
Potassium dihydrogen phosphate (KH_2PO_4)	2.2	7778-77-0	Not classified
Sodium pyruvate	1.0	113-24-6	Not classified
L-Tryptophan	1.0	73-22-3	Not classified
Potassium nitrate	1.0	7757-79-1	Oxidiser — not classified at this use concentration
Chromogenic Substrate Complex (proprietary blend)	0.2	Mixture	Not classified as hazardous at use concentration
Sodium lauryl sulphate	0.2	151-21-3	Mild irritant at high conc.; not significant at use level
Agar	15.0	9002-18-0	Not classified

Note: Ethanol (CAS 64-17-5) is used during manufacture as a processing aid to incorporate Magenta-GAL and is fully evaporated before packaging. It is not a declared ingredient of the finished product; residual ethanol is tested at batch release (see Certificate of Analysis).

Section 4 — First-Aid Measures

Inhalation — Remove to fresh air. If breathing is difficult, seek medical attention. Rinse nose and mouth with water if dust has been inhaled.

Skin Contact — Wash with soap and water. Remove contaminated clothing. Seek medical attention if irritation persists.

Eye Contact — Rinse cautiously with water for at least 15 minutes, holding eyelids open. Remove contact lenses if present and easy to do. Seek medical attention if irritation persists.

Ingestion — Rinse mouth. Do not induce vomiting. Seek medical attention if a large quantity is swallowed or symptoms occur.

Most Important Symptoms — Mechanical irritation of eyes, skin, and respiratory tract from dust exposure. No specific systemic toxicity known at normal handling levels.

Advice to Physician — Treat symptomatically. No specific antidote required.

Section 5 — Fire-Fighting Measures

Suitable Extinguishing Media	Water spray, carbon dioxide, dry chemical powder, foam
Unsuitable Extinguishing Media	High-pressure water jet (may disperse dust)
Specific Hazards	Combustible organic powder. Contains potassium nitrate (an oxidiser) at low concentration (1.0 g/L in the formulated blend) — keep away from strong reducing agents and ignition sources during bulk storage of raw material. Ethanol used during manufacture is highly flammable — no naked flames or ignition sources during the ethanol evaporation step; ensure adequate ventilation.
Protective Equipment for Firefighters	Self-contained breathing apparatus and full protective clothing for large fires

Section 6 — Accidental Release Measures

Personal Precautions	Avoid raising dust. Use PPE as per Section 8. Ensure adequate ventilation.
Environmental Precautions	Prevent entry into drains, watercourses, or soil
Containment & Clean-Up	Sweep or vacuum (with HEPA filtration) into a suitable, labelled container for disposal. Avoid dry sweeping that generates dust.
Disposal Reference	See Section 13

Section 7 — Handling and Storage

Handling Precautions	Avoid generating and breathing dust. Handle in a well-ventilated area for bulk quantities. Avoid contact with skin and eyes.
Storage Conditions	Store in tightly sealed original container, 2–25°C, dry, protected from moisture and direct light
Incompatibilities	Keep raw potassium nitrate component away from strong reducing agents; not applicable to the finished blended product at use concentration
Prepared Medium	Once rehydrated and poured, store plates at 2–8°C, protected from light; use within 2 weeks
Manufacturing Process Note	Ethanol is used only during manufacture (Magenta-GAL incorporation) in a ventilated area free of ignition sources, and is fully evaporated before the product is packaged

Section 8 — Exposure Controls / Personal Protection

Occupational Exposure Limits	No specific exposure standard established; treat as a nuisance dust — Australian WES for inhalable dust (not otherwise classified): 10 mg/m³ (TWA)
Engineering Controls	Local exhaust ventilation or fume hood when weighing bulk powder
Respiratory Protection	P1/P2 particulate respirator when weighing or handling bulk powder
Eye Protection	Safety glasses or goggles
Hand Protection	Nitrile gloves
Body Protection	Laboratory coat

Section 9 — Physical and Chemical Properties

Appearance (powder)	Beige to light tan, free-flowing, homogeneous powder
Appearance (prepared)	Light amber to pale yellow, slightly opalescent gel
Odour	Slight characteristic odour
pH (prepared, 25°C)	7.0 ± 0.2
Solubility	39.3 g/L in water; disperses on boiling
Flammability	Combustible organic powder; not self-igniting under normal conditions
Bulk Density	Not determined (product-specific; refer to Certificate of Analysis)

Section 10 — Stability and Reactivity

Reactivity	Stable under normal storage and handling conditions
Chemical Stability	Stable when stored as directed. Chromogenic Substrate Complex is light- and heat-sensitive — DO NOT AUTOCLAVE the prepared medium.
Possibility of Hazardous Reactions	None known at formulated use concentration
Conditions to Avoid	Excessive heat (autoclaving of prepared medium), moisture ingress, prolonged light exposure
Incompatible Materials	None known at formulated use concentration
Hazardous Decomposition Products	Thermal decomposition may release carbon oxides and nitrogen oxides

Section 11 — Toxicological Information

Acute Toxicity	Not classified; no acute toxicity data indicating hazard at normal handling levels
Skin Corrosion/Irritation	Not classified; may cause mild mechanical irritation from dust
Serious Eye Damage/Irritation	Not classified; may cause mild mechanical irritation from dust
Respiratory/Skin Sensitisation	Not classified
Carcinogenicity / Mutagenicity / Reproductive Toxicity	Not classified; no components listed as carcinogens (IARC, ACGIH, NTP) at use concentrations
Aspiration Hazard	Not classified

Section 12 — Ecological Information

Ecotoxicity	Not expected to be harmful to aquatic organisms at anticipated environmental concentrations; not extensively tested
Persistence and Degradability	Organic components (peptone, sorbitol, agar) are readily biodegradable
Bioaccumulative Potential	Not expected to bioaccumulate
Mobility in Soil	Not applicable — soluble organic mixture
Other Adverse Effects	None known

Section 13 — Disposal Considerations

Disposal Method	Autoclave inoculated/prepared media at 121°C for a minimum of 15 minutes before disposal as microbiological/biological waste, in accordance with local regulations
Uninoculated Powder/Medium	Dispose of as general laboratory chemical waste via a licensed waste contractor in accordance with EPA (Victoria) requirements
Packaging	Dispose of empty containers in accordance with local council recycling/waste requirements

Section 14 — Transport Information

UN Number	Not applicable — not classified as dangerous goods
Transport Hazard Class	Not applicable — ADG, IMDG, IATA: Not Dangerous Goods
Packing Group	Not applicable

Environmental Hazards	Not applicable
Special Precautions	None

Section 15 — Regulatory Information

Australian Regulations	Not classified as a Scheduled Poison under the SUSMP (Poisons Standard). Not listed on the AICIS chemical inventory as a chemical of concern for the mixture as supplied.
WHS Regulations 2023 (Vic)	Classified per GHS 7th Edition as outlined in Section 2 (precautionary dust classification)
International Inventories	Components are listed on relevant chemical inventories (TSCA, EINECS) where applicable to individual ingredients

Section 16 — Other Information

Preparation Date	August 2025
Revision	Rev. 4.0 — supersedes Rev. 3.0
Revision Notes	Rev. 2.0: formula updated to verified reference composition. Rev. 3.0: added ethanol as a manufacturing processing aid with associated hazard and residual solvent notes. Rev. 4.0: corrected phosphate buffer salts from sodium to potassium form (K_2HPO_4 / KH_2PO_4) to match verified reference source
Abbreviations	GHS = Globally Harmonised System; WHS = Work Health and Safety; TWA = Time-Weighted Average; SUSMP = Standard for the Uniform Scheduling of Medicines and Poisons