



Safety Data Sheet

R2A Broth (Reasoner's 2A Broth) | Cat. No. AS-1397 | GHS 7th Edition / WHS Regulations 2023 (Australia)

Section 1 — Identification

Product Name	R2A Broth (Reasoner's 2A Broth)
Catalogue No.	AS-1397
Recommended Use	Low-nutrient microbiological liquid medium — laboratory research only
Restrictions on Use	Not for human, animal, or food 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 under Australian WHS Regulations 2023 at typical laboratory quantities. As a fine dehydrated powder, bulk handling may generate dust that is mechanically irritating to the respiratory tract and eyes.

GHS Classification	Not classified
Precautionary Statements	P260 — Do not breathe dust. P264 — Wash hands after handling. P270 — Do not eat/drink/smoke when using this product. P501 — Dispose of contents/container per local regulations.
Biological Hazard Note	Environmental water samples and inoculated media may contain pathogenic or opportunistic microorganisms. Handle all inoculated media in accordance with applicable Biosafety Level (BSL) requirements and institutional biosafety guidelines.

Section 3 — Composition / Information on Ingredients

Component	g/L	CAS No.	Classification
Proteose peptone	0.500	73049-73-7	Not classified
Casein acid hydrolysate (casamino acids)	0.500	65072-00-6	Not classified
Yeast extract	0.500	8013-01-2	Not classified
Dextrose (D-glucose)	0.500	50-99-7	Not classified



Component	g/L	CAS No.	Classification
Soluble starch	0.500	9005-84-9	Not classified
Dipotassium phosphate	0.300	7758-11-4	Not classified
Sodium pyruvate	0.300	113-24-6	Not classified
Magnesium sulphate	0.024	7487-88-9	Not classified

Section 4 — First-Aid Measures

Inhalation	Remove to fresh air. Seek medical attention if symptoms persist.
Skin Contact	Wash with soap and water for at least 15 minutes. Remove contaminated clothing.
Eye Contact	Irrigate with water for at least 15 minutes. Seek immediate medical attention.
Ingestion	Do not induce vomiting. Rinse mouth. Seek medical attention.

Section 5 — Fire-Fighting Measures

Suitable Extinguishing Media	Not flammable. Use CO ₂ or dry chemical powder if involved in a fire.
Specific Hazards	No unusual fire or explosion hazards known.

Section 6 — Accidental Release Measures

Spill (powder)	Sweep up; avoid dust generation. Collect in a sealed, labelled container.
Spill (inoculated)	Treat as a biological hazard. Decontaminate per institutional biosafety protocol.

Section 7 — Handling and Storage

Handling Precautions	Avoid generating and breathing dust. Handle in a well-ventilated area.
Storage Conditions	Below 30°C, dry, original tightly sealed container
Prepared Medium	Store at 2–8°C, protected from light; use within 4 weeks

Section 8 — Exposure Controls / Personal Protection



PPE Nitrile gloves, safety goggles, lab coat. Biosafety cabinet required for work with inoculated media.

Respiratory Protection P1/P2 particulate respirator when weighing or handling bulk powder

Section 9 — Physical and Chemical Properties

Appearance (powder) Cream to yellow, homogeneous, free-flowing powder

Appearance (prepared) Yellow-coloured, clear solution

pH (prepared, 25°C) 7.2 ± 0.2

Solubility 3.12 g/L in water

Section 10 — Stability and Reactivity

Chemical Stability Stable under recommended storage conditions

Conditions to Avoid Excessive heat (over-autoclaving degrades carbohydrate components), moisture ingress

Section 11 — Toxicological Information

Acute Toxicity Not classified; no acute toxicity data indicating hazard at normal handling levels

Skin/Eye Irritation Not classified; may cause mild mechanical irritation from dust

Section 12 — Ecological Information

Ecotoxicity Not expected to be harmful to aquatic organisms at anticipated environmental concentrations

Persistence and Degradability Organic components are readily biodegradable

Section 13 — Disposal Considerations

Uninoculated Medium Dispose via licensed chemical waste contractor or as general laboratory waste per local EPA regulations



Inoculated / Used Broth

Autoclave at 121°C for 30 minutes to inactivate biological material before disposal. Dispose of decontaminated liquid per institutional policy.

Section 14 — Transport Information

Transport

Not classified as dangerous goods (ADG / IATA / IMDG)

Section 15 — Regulatory Information

WHS Regulations 2023

Compliant — not classified as hazardous

ARTG / TGA

Not registered — laboratory use only

Section 16 — Other Information

Preparation Date

August 2025

Revision

Rev. 1.0

Key Data Sources

Reasoner DJ, Geldreich EE. Appl Environ Microbiol. 1985;49(1):1–7;
HiMedia R2A Broth (M1687) Technical Data Sheet

Disclaimer

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