



Technical Data Sheet

AS-1326

www.ausamics.com.au

Phenol Red Broth Base

Catalogue No.: AS-1326 | Version: 1.0 | Issue Date: 2025-01-01

Product Specifications

Product Name	Phenol Red Broth Base
Catalogue Number	AS-1326
Format	Dehydrated powder medium (base — no carbohydrate included)
Appearance	Light pink to salmon homogeneous powder
Final pH (25 °C)	7.4 ± 0.2 (red/orange colour after reconstitution)
Indicator	Phenol red — red (alkaline/neutral) / yellow (acid)
Gas Detection	Via inverted Durham tube

Composition — Base (per litre)

Ingredient	g/L	Function
Proteose Peptone / Pancreatic Digest of Casein	10.0	Nitrogen source (low level)
Beef Extract	1.0	Growth factors
Sodium Chloride (NaCl)	5.0	Osmotic balance
Phenol Red	0.025	pH indicator (pKa ~7.4)

Preparation Instructions

1. Dissolve 16.025 g base powder + 5–10 g chosen carbohydrate in 1 litre of purified water. Mix well.
2. Dispense 4–5 mL into small tubes, each containing an inverted Durham tube (for gas detection).
3. Autoclave at 121 °C for 15 minutes (heat-stable sugars). For heat-labile sugars (inositol, adonitol): autoclave base separately at 118 °C; add filter-sterilised carbohydrate aseptically after cooling.
4. Allow to cool. Ensure Durham tubes are free of gas bubbles before inoculation.

Incubation Conditions

Standard 35–37 °C for 18–48 hours



Technical Data Sheet

AS-1326

www.ausamics.com.au

Slow reactions

Up to 7–30 days (e.g., inositol, adonitol fermentation)

Quality Control

Test Organism	Carbohydrate	Expected Result
<i>Escherichia coli</i> ATCC 25922	Glucose	Yellow + gas (A/G)
<i>Salmonella Typhimurium</i> ATCC 14028	Mannitol	Yellow, no gas (A)
<i>Pseudomonas aeruginosa</i> ATCC 27853	Glucose	No change / alkaline (red)

DISCLAIMER: This document is provided by AuSaMicS Pty Ltd for informational purposes only. Information is believed to be accurate at time of publication and is subject to change without notice. AuSaMicS Pty Ltd makes no warranties, express or implied, regarding fitness for a particular purpose. Users are responsible for determining the suitability of this product for their specific application. © 2026 AuSaMicS Pty Ltd. All rights reserved.