



TECHNICAL DATA SHEET

AS-1267 | LB Agar (Miller)
www.ausamics.com.au

LB Agar (Miller) — Technical Data Sheet

Catalogue Number: AS-1267

Product Identification

Product Name	LB Agar (Miller)
Catalogue Number	AS-1267
HS Code	3821.00.00
Medium Type	Dehydrated non-selective solid culture medium
Physical Form	Fine homogeneous powder
Colour (powder)	Light beige to cream
Colour (prepared)	Clear to slightly amber solid agar
Original Reference	Miller J.H. (1972) — Experiments in Molecular Genetics
ATCC Medium	ATCC Medium 1065

Composition (per litre of prepared medium)

Component	CAS Number	Function	Amount
Tryptone (Pancreatic Digest of Casein)	73049-73-7	Nitrogen, carbon, amino acids, peptides	10.0 g
Yeast Extract	8013-01-2	B-vitamins, growth factors, nucleotides	5.0 g
Sodium Chloride	7647-14-5	Osmotic balance (high-salt Miller formulation)	10.0 g
Agar	9002-18-0	Solidifying agent	15.0 g

Total per litre: 40.0 g | Final pH: 7.0 ± 0.2 at 25 °C

Physical & Chemical Specifications



TECHNICAL DATA SHEET

AS-1267 | LB Agar (Miller)
www.ausamics.com.au

Appearance (powder)	Light beige to cream fine homogeneous powder
Appearance (prepared)	Clear to slightly amber solid agar
pH (prepared medium, 25 °C)	7.0 ± 0.2
Loss on Drying (moisture)	≤ 5.0%
Gel strength	Firm agar, 20–25 mL per 90 mm Petri dish
Solubility	Completely soluble in purified water on heating
NaCl concentration	10.0 g/L — Miller (high-salt) formulation
Selectivity	Non-selective — broad range of bacteria
Differential	Non-differential (standard formulation)

Preparation Instructions

1. Suspend 40.0 g of dehydrated medium in 1 litre of demineralised or purified water.
2. Heat with agitation until fully dissolved.
3. Verify pH and adjust to 7.0 ± 0.2 if required.
4. Sterilise by autoclaving at 121 °C for 15 minutes.
5. Cool to 45–50 °C before adding supplements.
6. Add filter-sterilised antibiotics or supplements aseptically.
7. Dispense 20–25 mL per 90 mm sterile Petri dish.
8. Allow to solidify on a level surface at room temperature.

Performance Characteristics

Organism	ATCC No.	Expected Result	Incubation
Escherichia coli K-12	23716	Good growth — cream 1–3 mm colonies	37 °C, 12–18 h
E. coli DH5α	N/A	Good growth — suitable for cloning	37 °C, 12–16 h
E. coli BL21(DE3)	N/A	Good growth — protein expression	37 °C, 12–16 h
E. coli TOP10	N/A	Good growth — cloning host	37 °C, 12–16 h
Salmonella typhimurium	14028	Good growth	37 °C, 18–24 h



TECHNICAL DATA SHEET

AS-1267 | LB Agar (Miller)
www.ausamics.com.au

Storage & Stability

Dehydrated powder	15–30 °C, tightly closed
Protect from	Moisture, light, extreme temperatures
Plates (no antibiotics)	2–8 °C, inverted, up to 4 weeks
Plates (with antibiotics)	2–8 °C, use within 1–2 weeks
Shelf life	As per labelled expiry date

Quality Standards & References

Original Reference	Miller J.H. (1972) Experiments in Molecular Genetics, Cold Spring Harbor Laboratory
Standard References	Sambrook & Russell — Molecular Cloning; Current Protocols in Molecular Biology
ATCC Medium	ATCC Medium 1065
Batch Release Testing	pH, appearance, moisture, performance vs E. coli ATCC 23716
Country of Manufacture	Australia

Disclaimer

This product is manufactured and supplied by AuSaMics Pty Ltd for laboratory and research use only. It is not intended for human or veterinary consumption, therapeutic use, or in vitro diagnostic procedures without appropriate validation. AuSaMics Pty Ltd makes no representations or warranties, express or implied, regarding the fitness of this product for any particular purpose beyond its stated intended use. Users are solely responsible for compliance with all applicable laws, regulations, and safety requirements. AuSaMics Pty Ltd shall not be liable for any direct, indirect, incidental, or consequential damages arising from the use or misuse of this product. All information provided is believed to be accurate at the time of publication and is subject to change without notice.