

DEV Gelatin Agar

For determining the total microbial count and detecting gelatin-liquefying microorganisms in water according to the German methods for the examination of water and the German drinking water regulations (1990).

Typical Composition (g/litre)

Peptone from meat 10.0; meat extract 10.0; sodium chloride 5.0; gelatin 10.0; agar-agar 15.0.

Preparation

Suspend 50 g/litre, autoclave (15 min at 121 °C), pour plates.

pH: 7.3 ± 0.2 at 25 °C.

■ Do not overheat!

The plates are clear and yellowish-brown.

Experimental Procedure and Evaluation

According to the German methods, the medium is inoculated by the pour plate method and incubated for 44 ± 4 hours at

20 ± 2 °C. To evaluate the plates, flood them with a saturated solution of ammonium sulfate; clear zones then appear around the gelatin-liquefying colonies.

Quality control (spiral plating method)

Test strains	Inoculum (cfu/ml)	Recovery rate
Escherichia coli ATCC 25922	10 ³ -10 ⁵	≥ 70 %
Proteus vulgaris ATCC 13315	10 ³ -10 ⁵	≥ 70 %
Staphylococcus aureus ATCC 25923	10 ³ -10 ⁵	≥ 70 %
Enterococcus faecalis ATCC 11700	10 ³ -10 ⁵	≥ 70 %
Bacillus cereus ATCC 11778	10 ³ -10 ⁵	≥ 70 %
Pseudomonas aeruginosa ATCC 27853	10 ³ -10 ⁵	≥ 70 %
Aeromonas hydrophila ATCC 7966	10 ³ -10 ⁵	≥ 70 %



Escherichia coli
ATCC 25922



Aeromonas hydrophila
ATCC 7966