

Nutrient agar DEV

Code 84749.0500

Also known as
DEV Nutrient agar

Intended use

For determining the total microbial count in water according to the German Standard Methods and the German regulation for food examination.

Formula* - Composition in g/L

Peptone from meat.....	10.0
Meat extract.....	10.0
Sodium chloride.....	5.0
Agar.....	18.0

* Adjusted and/or supplemented as required to meet performance criteria

Final pH 7.3 ± 0.2 at 25 °C.

Instructions for preparation

Dissolve 43 g in 1 L of purified water by bringing to the boil with frequent shaking. Sterilise in the autoclave at 121 °C for 15 minutes.

Principle of the method and general information

Nutrient agar DEV is a general purposes medium recommended by German Standard Methods and the German regulation for determining the total microbial count in water.

Meat extract and meat peptone provide nitrogen, carbon, essential amino acids to support microbial growth, while sodium chloride is used to maintain the osmotic equilibrium.

Instruction for use

According to the German regulations, the medium is inoculated by the pour plate method and incubated at 20 ± 2 °C or 35 ± 1 °C for 44 ± 4 hours, aerobically.

Quality Control

Physical characteristics:

Appearance of powder	Yellow, fine, homogeneous, hygroscopic powder
Appearance of prepared medium	Yellow, limpid
pH (25°C)	7.3 ± 0.2

Microbiological characteristics:

Test strains	Incubation T° / t / At.	Inoculation method	Growth characteristics	Productivity Ratio
<i>E. faecalis</i> ATCC 19433	35°C / 18 h / AE	QT / 80-120 CFU	Good growth	PR ≥ 0.7
<i>P. aeruginosa</i> ATCC 27853	35°C / 18 h / AE	QT / 80-120 CFU	Good growth	PR ≥ 0.7
<i>B. cereus</i> ATCC 11778	35°C / 18 h / AE	QT / 80-120 CFU	Good growth	PR ≥ 0.7
<i>E. coli</i> ATCC 25922	35°C / 18 h / AE	EC	Good growth	
<i>K. pneumoniae</i> ATCC 27736	35°C / 18 h / AE	EC	Good growth	
<i>P. vulgaris</i> ATCC 13315	35°C / 18 h / AE	EC	Good growth	
<i>C. albicans</i> ATCC 18804	35°C / 18 h / AE	EC	Good growth	
<i>S. Thphimurium</i> ATCC 14028	35°C / 18 h / AE	EC	Good growth	
<i>A. hydrophila</i> ATCC 7965	30°C / 18 h / AE	EC	Good growth	

Notes

PR (Productivity Ratio): CFU obtained on the culture medium under test / CFU obtained on YEA

Incubation atmosphere AE:aerobic incubation

Inoculation method QT : quantitative surface plating method; EC: semi-quantitative, ecometric technique

ATCC is a registered trade mark of American Type Culture Collection

References

- Bundesgesundheitsamt: Amtliche Sammlung von Untersuchungsverfahren nach § 35 LMBG. Beuth Verlag Berlin, Köln.
- Verordnung über Trinkwasser und über Wasser für Lebensmittelbetriebe vom 12. Dezember 1990. - Bundesgesetzbl., Teil I ; 2613-2629 (1990).

Storage conditions

For laboratory use only. Keep tightly closed, away from bright light, in a cool dry place (+10°C to 30 °C and <60% RH).

Ordering information

84749.0500	Nutrient agar DEV	Bottle of 500 g
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