

2.8% Nutrient/Agar (with NaCl)

355-4478
356-4484

DEFINITION

This nutrient agar is suitable for the culture of non-fastidious bacteria in food.

STANDARDS

FOOD MICROBIOLOGY

• **ISO 21528-1&2 (December 2004):** Horizontal method for detection of *Enterobacteriaceae*. (these standards replace ISO 7402, ISO 8523 and ISO 5552)

PRINCIPLE

The nutrient substances provided by peptone and meat extract favor the growth of most bacteria.

PRESENTATION

• Ready to use

8 ml x 25 tubes

code 355-4478

• Dehydrated

500 g

code 356-4484

STORAGE

- Ready to use: +2-25°C
- Dehydrated: +15-25°C, in carefully sealed bottles in a cool, dry place
- Expiration date and batch number are shown on the package.

THEORETICAL FORMULA

Peptone	5 g
Meat extract	3 g
Sodium chloride	5 g
Agar	15 g
Distilled water	1,000 ml

Final pH (25°C) = 7.3 ± 0.2

OTHER PRODUCTS REQUIRED

(NOT SUPPLIED)

- Distilled water

EQUIPMENT REQUIRED (NOT SUPPLIED)

(non-exhaustive)

- Scales
- Sterile weighing bags
- Grinder
- Hotplate
- Mixer-homogenizer
- Test tubes (16 x 160 mm) with autoclave-proof stoppers
- 225 ml Pyrex bottles with autoclave-proof stoppers
- Sterile Petri dishes (Ø = 90 mm)

- Sterile pipettes (0.1 ml, etc)
- Sterile Pasteur pipettes (code 355-0751) or inoculating loop
- Sterile spreaders
- Water-bath precise to ±1°C
- Thermostatically-controlled incubation area, precise to ±1°C
- Autoclave
- All usual laboratory equipment

PREPARATION OF DEHYDRATED MEDIUM

Always shake well before use.

Dissolve 28 g of powder in 1 liter of distilled water. Wait for 5 minutes, then mix until a homogenous suspension is obtained.

Heat gently, stirring frequently, then bring to the boil until completely dissolved.

Dispense in containers, then sterilize in autoclave at 121°C ± 1°C for 15 minutes.

Reconstitution ratio: 28 g/l

500 g of powder makes 17.8 liters of medium.

PROTOCOL

Depending on the objective, this medium can be inoculated by:

- spreading 0.1 ml of sample on the surface,
- isolation by means of an inoculation loop or a Pasteur pipette (previously flame-sterilized).

PRECAUTION

Comply with Good Laboratory Practice.

QUALITY CONTROL OF MANUFACTURER

Every product manufactured and marketed by Bio-Rad is subject to a quality-assurance procedure at all stages, from the reception of raw materials to the marketing of the end-product. Each batch of finished product undergoes quality control and is marketed only if it satisfies the acceptability criteria.

Documentation relative to the production and control of each batch is kept on file.

PERFORMANCES/QUALITY CONTROL OF THE TEST

The growth performances of the media are verified with the following strains:

STRAINS	Results after 24 hr culture at 37°C
<i>Escherichia coli</i> ATCC 25922	Good growth
<i>Salmonella Enteritidis</i> ATCC 13076	Good growth
<i>Staphylococcus aureus</i> ATCC 25923	Good growth
<i>Staphylococcus epidermidis</i> ATCC 14990	Good growth
<i>Streptococcus pyogenes</i> ATCC 19615	Good growth

KEY WORDS

2.8% Nutrient with NaCl/Non-fastidious bacteria/Nutrient substances/Medium