Schaedler/Agar

356-9624

DEFINITION
Non-selective medium used for the culture of particularly fastidious anaerobes in the analysis of food products.

PRINCIPLE
The nutrient substances provided by the polypeptone and Trypto-Casein-Soy Broth and the vitamin factors of the yeast extract and glucose, used as an energy source, favor the development of most anaerobic bacteria.

PRESENTATION
Dehydrated
500 g **code 356-9624**

THEORETICAL FORMULA

Polypeptone	5 g
Trypto-casein-soy	10 g
Yeast extract	5 g
TRIS buffer	3 g
L-cysteine	0.4 g
Hemin	0.01 g
Glucose	5 g
Agar	13.5 g
Distilled water	1,000 ml

Final pH (25°C) = 7.6 ± 0.2

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

OTHER PRODUCTS REQUIRED (NOT SUPPLIED)
- Distilled water

EQUIPMENT REQUIRED (NOT SUPPLIED) (non-exhaustive)
- Scales
- Sterile weighing bags
- Grinder
- Hotplate
- Mixer-homogenizer
- 125 ml Pyrex bottles with autoclave-proof stoppers
- Sterile Pasteur pipettes (**code 355-0751**) or inoculating loop
- Water-bath precise to ± 1°C
- Thermostatically-controlled incubator or incubation room, precise to ± 1°C
- Autoclave
- All usual laboratory equipment

PREPARATION OF DEHYDRATED MEDIUM
Always shake well before use
Dissolve 42 g of powder in 1 liter of distilled water, mix until a homogenous suspension is obtained.
Heat gently swirling frequently, then bring to the boil until completely dissolved.
Dispense 100 ml per bottle and sterilize in autoclave at 121°C ± 1°C for 15 minutes.

Reconstitution ratio: 42 g/l.
500g of powder makes 11.9 liters of medium.

PROTOCOL
Inoculation and incubation
At the moment of use, the following can be added to the sterile medium, cooled to 44°C - 47°C:
- 0.005% of vitamin K3 in sterile solution
- 5% of sheep or horse blood
- selective blends

Incubate at 37°C for 18-48 hours under optimal conditions (aerobiosis/anaerobiosis) for the bacteria being detected.

READING AND INTERPRETATION
Colonies observed on this medium can be identified with the aid of appropriate media.

PRECAUTIONS
- The time lapse between the end of preparation of the stock solution (or the 10^{-1} dilution in the case of a solid product) and the moment when the dilutions come into contact with the culture medium must not exceed 15 minutes.
- Comply with Good Laboratory Practice.

PERFORMANCES / QUALITY CONTROL OF THE TEST
The growth performances of the media are verified with the following strains:

See table next page…

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Schaedler/Agar

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

STRAINS	Results after 24h-72h anaerobiotic culture at 37°C *
Clostridium perfringens ATCC 12924	Positive
Fusobacterium nucleatum CIP 101130	Positive
Bacteroides fragilis ATCC 25285	Positive
Peptococcus magnus ATCC 19456	Positive
Propionibacterium acnes CIP 6042	Positive
Peptostreptococcus anaerobius CIP 602	Positive

*** +5% of horse blood.**

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.

KEY WORDS

Schaedler / Anaerobes / Food products / Tests / Medium.

BIBLIOGRAPHY

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