

TM 644 – CLOSTRIDIAL AGAR

INTENDED USE

For selective isolation of pathogenic Clostridia from mixed flora.

PRODUCT SUMMARY AND EXPLANATION

One of the major species of anaerobic bacteria to cause disease in humans is *Clostridium*. *Clostridium* species cause tetanus and gas gangrene that ultimately leads to tissue damage. Another *Clostridium* species produces the lethal botulinum toxin, the causative agent of botulism. Clostridial Agar formulated by Vera is recommended for the selective isolation of pathogenic Clostridia from mixed flora. The media is well supplemented to support luxuriant growth of *Clostridium* species.

Accompanying enteric bacteria including *Proteus*, *Pseudomonas* and *Bacillus* species are inhibited by neomycin sulphate and sodium azide incorporated in the medium. The ideal method of inoculation of Clostridial Agar is direct inoculation of sterile, cooled medium with the specimen (in tubes). Alternatively, agar plates of the medium can also be inoculated by streaking.

COMPOSITION

Ingredients	Gms / Ltr
Tryptone	17.000
Soya peptone	3.000
Dextrose	6.000
Sodium chloride	2.500
Sodium thioglycollate	1.800
L-Cystine	0.250
Sodium formaldehyde sulfoxylate	1.000
Neomycin sulphate	0.150
Sodium azide	0.200
Agar	14.500

PRINCIPLE

Tryptone and soya peptone provide the nitrogenous and carbonaceous compounds, long chain amino acids and other essential nutrients, mainly the nitrogen compounds. Dextrose serves as the carbon or fermentable carbohydrate source. Lcystine is an amino acid, which promotes the growth of Clostridia. Sodium thioglycollate and sodium formaldehyde sulfoxylate are the reducing agents that help to create low oxidation-reduction potential enabling the growth of Clostridia.

INSTRUCTION FOR USE

- Dissolve 46.4 grams in 1000 ml distilled water.
- Heat to boiling to dissolve the medium completely.
- Sterilize by autoclaving at 118°C for 15 minutes. Cool to 45-50°C.
- Mix well and pour into sterile Petri plates.

QUALITY CONTROL SPECIFICATIONS



Appearance of Powder : Cream to beige homogeneous free flowing powder.
Appearance of prepared medium : Yellow coloured, clear to slightly opalescent gel forms in Petri plates.
pH (at 25°C) : 7.0±0.2

INTERPRETATION

Cultural characteristics observed after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Incubation Temperature	Incubation Period
<i>Clostridium perfringens</i>	12924	50-100	Luxuriant	≥70%	35-37°C	18-24 Hours
<i>Clostridium sporogenes</i>	11437	50-100	Luxuriant	≥70%	35-37°C	18-24 Hours
<i>Clostridium tetani</i>	10779	50-100	Luxuriant	≥70%	35-37°C	18-24 Hours
<i>Escherichia coli</i>	25922	≥10 ³	Inhibited	0%	35-37°C	18-24 Hours
<i>Staphylococcus aureus subsp.aureus</i>	25923	≥10 ³	Inhibited	0%	35-37°C	18-24 Hours

PACKAGING:

In pack size of 100 gm and 500 gm bottles.

STORAGE

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 25-30°C and protect from direct sunlight. Under optimal conditions, the medium has a shelf life of 4 years. When the container is opened for the first time, note the time and date on the label space provided on the container. After the desired amount of medium has been taken out replace the cap tightly to protect from hydration.

Product Deterioration: Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.













DISPOSAL

After use, prepared plates, specimen/sample containers and other contaminated materials must be sterilized before discarding.

REFERENCES

1. Alcamo E. I., 2001, Fundamentals of Microbiology, 6th Ed., Jones and Bartlett Publisher
2. Vera, 1962, Presented Pa. Soc. Med. Tech., York, P



 GMP Good Manufacturing Practices Certified	 IVD For In Vitro Diagnostic Use	 QTY. Quantity	 LOT/ B. NO. Lot / Batch Number	 REF Catalogue Number	 Manufacturer
 Temperature Unit	 EC REP MedNet GmbH Birkhofstrasse 10 48163 Muenster, Germany Authorized Representative	 European Conformity	 QR Code	 Consults Instructions for Use	 Best Before

NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices.

***For Lab Use Only**
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