

Product Data Sheet

CLOSTRIDIAL AGAR

Product No. GB-DCM-00076-1A

INTENDED USE

For selective isolation of pathogenic Clostridia from mixed flora.

PRODUCT SUMMARY

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.

Product Specifications

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 sulphoxylate	1.000
Neomycin sulphate	0.150
Sodium azide	0.200
Agar	15.000

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. Lcysteine 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 purified/ distilled water.
- Heat to boiling to dissolve the medium completely.
- Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes. Cool to 45-50°C.
- Mix well and pour into sterile Petri plates.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Incubation Temperature	Incubation Period
Clostridium perfringens	12924	50-100	Luxuriant	>=70%	35-37°C	18-24 Hours
Clostridium sporogenes	11437	50-100	Luxuriant	>=70%	35-37°C	18-24 Hours
Clostridium tetani	10779	50-100	Luxuriant	>=70%	35-37°C	18-24 Hours
Escherichia coli	25922	>=103	Inhibited	0%	35-37°C	18-24 Hours
Staphylococcus aureus subsp.aureus	25923	>=103	Inhibited	0%	35-37°C	18-24 Hours

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) : 6.0±0.2



DISPOSAL

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

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.

This product is for research use only.