

TM 2114 – CHROMOGENIC CLOSTRIDIAL AGAR BASE

INTENDED USE

For selective isolation and presumptive identification of *Clostridium species*.

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. Chromogenic is the modification for chromogenic differentiation.

COMPOSITION

Ingredients	Gms / Ltr
Tryptone	15.000
Yeast extract	10.000
Dextrose	1.000
Sodium chloride	5.000
Sodium thioglycollate	0.500
Chromogenic mixture	3.310
Agar	13.000

PRINCIPLE

Tryptone and yeast extract provide the essential nutrients, mainly the nitrogen compounds. Dextrose serves as the carbon or fermentable carbohydrate source. Sodium thioglycollate is the reducing agents that help to create low oxidation-reduction potential enabling the growth of Clostridia. Also the media is well supplemented to support luxuriant growth of Clostridium species. The selective supplements inhibits other enteric bacteria.

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.

INSTRUCTION FOR USE

- Dissolve 47.81 grams in 1000 ml distilled water.
- Heat to boiling to dissolve the medium completely. DO NOT AUTOCLAVE.
- Cool to 45-50°C.
- Aseptically add rehydrated contents of one vial of PERFRINGEN'S T.S.C.SUPPLEMENT (TS 076).
- 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)	: 7.1 ± 0.2



INTERPRETATION

Cultural characteristics observed after incubation (under anaerobic condition).

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Color of the colony	Incubation Temperature	Incubation Period
<i>Clostridium perfringens</i>	13124	50-100	luxuriant	>= 50%	Pale yellowish green	35-37°C	24-48 Hours
<i>Clostridium sporogenes</i>	11437	50-100	luxuriant	>= 50%	Pale green-bluish green	35-37°C	24-48 Hours
<i>Clostridium sporogenes</i>	19404	50-100	luxuriant	>= 50%	Pale green-bluish green	35-37°C	24-48 Hours
<i>Staphylococcus aureus</i>	25923	>=10 ³	Inhibited	0%		35-37°C	24-48 Hours
<i>Escherichia coli</i>	25922	>=10 ³	Inhibited	0%		35-37°C	24-48 Hours

PACKAGING:

In pack size of 100 gm and 500gm bottles.

STORAGE

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 2-8°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 Publishers.
2. Vera, 1962, Presented Pa. Soc. Med. Tech., York, Pa.



 GMP Good Manufacturing Practices Certified	 IVD For In Vitro Diagnostic Use	 QTY. Quantity	 REF Catalogue Number	 Manufacturer
 Temperature Unit	 LOT/ B. NO. Lot / Batch Number	 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**
Revision: 30 Oct., 2023