

CM 21400 – PHENYLETHANOL AGAR BASE

INTENDED USE

For the isolation of gram-positive organisms like Staphylococci and Streptococci.

PRODUCT SUMMARY AND EXPLANATION

Phenylethyl alcohol is a chemical agent that exhibits inhibitory action against gram-negative and certain gram-positive bacteria. Phenylethanol Agar Base is formulated for the selective isolation of gram-positive bacteria. This medium can be supplemented with 5 % sheep blood. This medium is especially useful when specimens are contaminated with swarming Proteus species. It is also useful in the diagnostic studies of wounds and exudate cultures. However, Phenylethanol Agar Base can't be used to study haemolytic reactions as the results are atypical.

COMPOSITION

Ingredients	Gms / Ltr
Casein enzymic hydrolysate	10.000
Beef extract	3.000
Sodium chloride	5.000
Phenylethyl alcohol	2.5000
Agar	15.000

PRINCIPLE

Casein enzymic hydrolysate provides nitrogen, carbon, sulfur and trace elements to the growing organisms. Addition of sheep blood provides many growth factors. Sodium chloride maintains osmotic equilibrium. Addition of phenylethyl alcohol to a nutritive medium permits the growth of gram-positive organisms but inhibits the gram-negative organisms found in the same specimen. Phenylethyl alcohol exerts inhibitory bacteriostatic action on gram-negative bacteria by inhibiting their DNA synthesis.

INSTRUCTION FOR USE

Dissolve 35.5 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.

For preparing Blood agar, cool the medium to 45°C and aseptically add 5% v/v sterile defibrinated blood. Mix well and pour into sterile Petri plates.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder	: Cream to yellow homogeneous free flowing powder.
Appearance of prepared medium	: Light amber coloured clear to slightly opalescent gel forms in petri plates
pH (at 25°C)	: 7.3 ± 0.2

INTERPRETATION

Cultural characteristics observed after incubation.



Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Growth w/5% blood	Colour of Colony	Incubation Temperature	Incubation Period
Escherichia coli	25922	50-100	None - poor	0-10%	None - poor	-	35-37°C	18-48 Hours
Enterococcus faecalis	29212	50-100	Fair-good	20-40%	Good-luxuriant	Blue-grey	35-37°C	12-16 Hours
Salmonella Typhi	6539	50-100	None - fair	0-30%	None - fair	-	35-37°C	12-16 Hours
Staphylococcus aureus	25923	50-100	None - poor	0-10%	Good-luxuriant	White to grey or cream to yellow	35-37°C	12-16 Hours

PACKAGING:

Inpacksize of 100 gm 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. Lilley B. D. and Brewer J. H., 1953, J. Am. Pharm. Assoc., 42:6.
2. Holzman J. A., 1958, Am. J. Med. Technol., 24 (5), 327,342
3. Dowell, Hill and Altemeier, 1964, J. Bacteriol., 88:1811.

 Good Manufacturing Practices Certified	 For In Vitro Diagnostic Use	 Quantity	 Lot / Batch Number	 Catalogue Number	 Manufacturer
 Temperature Unit	 Authorized Representative MedNet GmbH Birkstrasse 10 40143 Muenster, Germany	 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

