

CM 21,373 – PHENOL RED BROTH BASE W/ MEAT EXTRACT

INTENDED USE

For determination of carbohydrates fermentation.

PRODUCT SUMMARY AND EXPLANATION

Phenol Red Broth Base w/ Meat extract is a complete medium without added carbohydrates. The carbohydrate of choice can be added for determination of fermentation reactions of pure cultures of microorganisms. It can also be used as a negative control for studying fermentation reactions. Ability of an organism to ferment specific carbohydrate added in a basal medium, results in the production of acid and gas which helps in the differentiation between genera and species.

COMPOSITION

Ingredients	Gms / Ltr
Casein enzymic hydrolysate	10.000
Meat extract	1.000
Sodium chloride	5.000
Phenol red	0.018

PRINCIPLE

The medium consists of Casein enzymic hydrolysate and meat extract provide nitrogenous nutrients to the organisms. Phenol red is the pH indicator which turns yellow at acidic pH. Sodium Chloride maintains osmotic equilibrium.

INSTRUCTION FOR USE

Dissolve 16.02 grams in 1000 ml purified/distilled water. Add the test carbohydrate in desired quantity.

Heat if necessary to dissolve the medium completely.

Mix well and dispense in fermentation tubes (tubes containing inverted Durham's tubes).

Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.

Note: For critical studies, it is recommended to use filter sterilized carbohydrate which is to be incorporated aseptically in the sterile medium base, if desired.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder : Light yellow to pink coloured homogeneous free flowing powder.

Appearance of prepared medium : Red coloured clear solution without any haziness.

pH (at 25°C) : 7.4 ± 0.2

INTERPRETATION

Cultural characteristics observed after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Acid	Gas	Acid w/ addition of dextrose	Gas w/ addition of dextrose	Incubation Temperature	Incubation Period
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Escherichia coli	25922	50-100	Luxuriant	Negative reaction, no colour change	Negative reaction	Positive reaction, yellow colour	Positive reaction	35 - 37°C	18 - 24 Hours
Klebsiella pneumoniae	13883	50-100	Luxuriant	Negative reaction, no colour change	Negative reaction	Positive reaction, yellow colour	Positive reaction	35 - 37°C	18 - 24 Hours
Proteus vulgaris	13315	50-100	Luxuriant	Negative reaction, no colour change	Negative reaction	Positive reaction, yellow colour	Positive reaction	35 - 37°C	18 - 24 Hours
Salmonella Typhimurium	14028	50-100	Luxuriant	Negative reaction, no colour change	Negative reaction	Positive reaction, yellow colour	Positive reaction	35 - 37°C	18 - 24 Hours
Shigella flexneri	12022	50-100	Luxuriant	Negative reaction, no colour change	Negative reaction	Positive reaction, yellow colour	Negative reaction	35 - 37°C	18 - 24 Hours

PACKAGING:

Inpacksize 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. MacFaddin J., 1985, Media for Isolation-Cultivation-Identification-Maintenance of Medical Bacteria, Vol. 1, Williams and Wilkins, Baltimore.
2. Finegold and Barou, 1986, Bailey and Scotts Diagnostic Microbiology, 7th ed., The C.V. Mosby Co., St. Louis.

 Good Manufacturing Practices Certified	 For In Vitro Diagnostic Use	 Quantity	 Lot / Batch Number	 Catalogue Number	 Manufacturer
 Temperature Unit	 Authorized Representative MedNet GmbH Barkstrasse 10, 48163 Münster, 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

