TM 1867 – POTASSIUM CYANIDE BROTH BASE W/O KCN

INTENDED USE

For differentiation of the members of *Enterobacteriaceae* on the basis of potassium cyanide tolerance.

PRODUCT SUMMARY AND EXPLANATION

Potassium Cyanide Broth Base is used for the differentiation of members of Enterobacteriaceae on the basis of Potassium Cyanide tolerance. Potassium Cyanide Broth Base was originally formulated by Moeller and Kauffman and Moeller. This medium was later modified by Edwards and Ewing and Edwards and Fife.

COMPOSITION

Ingredients	Gms / Ltr
Proteose peptone	3.000
Disodium phosphate	5.640
Sodium chloride	5.000
Monopotassium phosphate	0.225

PRINCIPLE

This medium consists of Proteose peptone which provides nitrogenous compounds, sulphur, trace elements essential for growth. Phosphates buffer the medium. Sodium chloride maintains osmotic equilibrium. Potassium cyanide inhibits many bacteria including *Salmonella*, *Shigella* and *Escherichia*, while members of the *Klebsiella*, *Citrobacter* and *Proteus* groups grow well. Potassium cyanide medium usually remains stable for upto 4 weeks at 4°C.

INSTRUCTION FOR USE

- Dissolve 13.86 grams in 1000 ml purified/distilled water.
- Heat if necessary to dissolve the medium completely.
- Dispense in 100 ml amounts and sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.
- Cool to room temperature and aseptically add sterile 1.5 ml of 0.5% potassium cyanide solution to each 100 ml of basal medium.
- Mix thoroughly and dispense in 1 ml amounts.
  Caution: Being fatally toxic extreme care should be taken while handling potassium cyanide solution. Never mouth pipette potassium cyanide solution.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder : Cream to yellow homogeneous free flowing powder.
Appearance of prepared medium : Light amber coloured clear solution without any precipitate.
pH (at 25°C) : 7.6 ± 0.2

INTERPRETATION

Cultural characteristics observed with added sterile 0.5% sterile Potassium Cyanide Solution after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth without KCN	Growth with KCN	Incubation Temperature	Incubation Period
Citrobacter freundii	8090	50-100	Good-luxuriant	Good-luxuriant	35-37°C	24-48 Hours
Escherichia coli	25922	50-100	Good	Inhibited	35-37°C	24-48 Hours
Klebsiella pneumoniae	13883	50-100	Good-luxuriant	Good-luxuriant	35-37°C	24-48 Hours
Proteus vulgaris	13315	50-100	Good-luxuriant	Good-luxuriant	35-37°C	24-48 Hours
Pseudomonas aeruginosa	27853	50-100	Good-luxuriant	Good-luxuriant	35-37°C	24-48 Hours
Salmonella Enteritidis	13076	50-100	Good	Inhibited	35-37°C	24-48 Hours
Shigella flexneri	12022	50-100	Good	Inhibited	35-37°C	24-48 Hours
Salmonella Typhi	6539	50-100	Good	Inhibited	35-37°C	24-48 Hours

PACKAGING:
In pack size of 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

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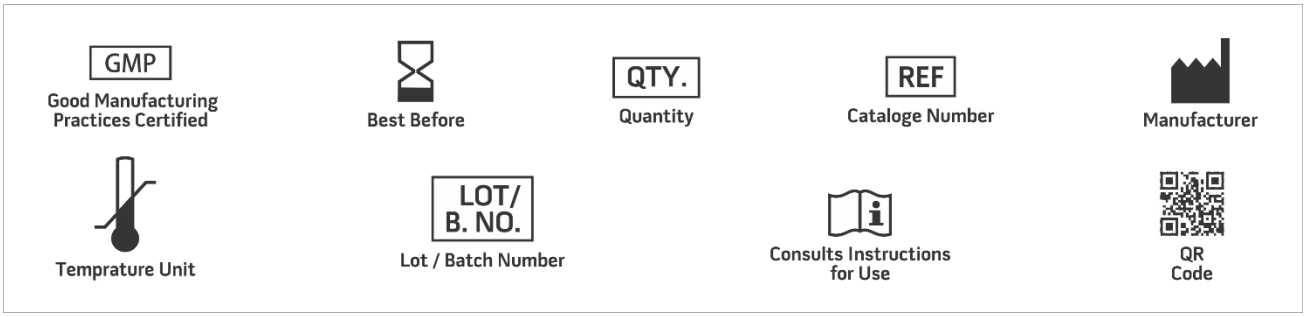

NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices.

***For Lab Use Only**

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