TM 2275 – PEIZER TB MEDIUM BASE

INTENDED USE
For cultivation of *Mycobacterium tuberculosis*.

PRODUCT SUMMARY AND EXPLANATION
Peizer TB Medium was formulated by Peizer et al for the cultivation of *Mycobacterium tuberculosis* and also for the diagnosis of tuberculosis. It can also be used for determining the sensitivity of *Mycobacterium tuberculosis* to therapeutic agents.

COMPOSITION

Ingredients	Gms / Ltr
Casein acid hydrolysate	10.000
Beef extract	3.000
L-Asparagine	3.000
Potato starch	15.000
Ferric ammonium citrate	0.100
Magnesium sulphate	0.015
Dipotassium hydrogen phosphate	3.500
Citric acid	0.100
Agar	15.000

PRINCIPLE
This medium consists of Beef extract and casein acid hydrolysate which are the rich sources of nitrogen and some additional growth factors for the growth of tubercle bacilli. Egg yolk emulsion provides fatty acids and proteins required for the metabolism of *Mycobacteria*. L-Asparagine and starch serves as the amino acid and carbohydrate source respectively. Citric acid holds certain inorganic cations in solution. Malachite green inhibits certain contaminating bacteria.

INSTRUCTION FOR USE
- Dissolve 49.72 grams in 1000 ml purified/ distilled water.
- Heat to boiling to dissolve the media completely.
- Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.
- Cool to around 55°C and aseptically add egg yolk emulsion (prepared from 10 sterile egg yolks and 25 ml sterile saline, to which 1 ml of sterile 20% dextrose solution and 13 ml of 1% malachite green solution is added) and add 40 ml sterile glycerol.
- Mix thoroughly and dispense in tubes, then allow it to solidify as slants.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder : Light yellow to light tan homogeneous free flowing powder.
Appearance of prepared medium : Light green coloured opaque gel forms in tube as slants.

INTERPRETATION

Cultural characteristics observed after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Incubation Temperature	Incubation Period
Mycobacterium fortuitum	6841	50-100	Luxuriant	35-37°C	2-4 Weeks
Mycobacterium kansasii	12478	50-100	Luxuriant	35-37°C	2-4 Weeks
M. tuberculosis H37RV	25618	50-100	Luxuriant	35-37°C	2-4 Weeks

PACKAGING:

In pack size of 500 gm bottles.

STORAGE

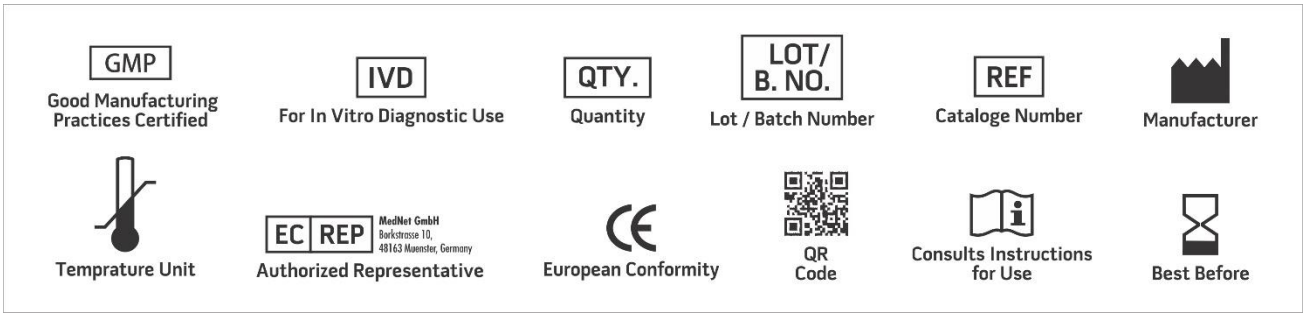
Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 25-30°C and protect from direct sunlight. Under optimal conditions, the medium has a shelf life of 4 years. When the container is opened for the first time, note the time and date on the label space provided 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

1. Peizer and Schecter, 1950, Am. J. Clin. Path., 20:682.
2. Peizer, Widelock and Schecter, 1951, Am. J. Clin. Path., 21:982.
3. Dubos and Middlebrook, 1947, Am. Rev. Tuberc., 56:334



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

***For Lab Use Only**

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