TM 1250 – TRICHOMONAS MODIFIED CPLM MEDIUM BASE (MODIFIED CPLM MEDIUM BASE

INTENDED USE

For cultivation of *Trichomonas* species.

PRODUCT SUMMARY AND EXPLANATION

Trichomonas is a protozoan, similar to bacteria. *Trichomonas vaginalis* is a causative agent of trichomonalis, the most common protozoan infection in humans. It can infect the vagina and urethra in women, and sometimes the prostate gland in men. The duration of survival of *T. vaginalis* in transport medium is fairly limited. The organisms die rapidly when dried on a swab; an alternative approach is to place the loaded swab promptly into a tube of Trichomonas Culture Medium supplemented with horse serum, penicillin and streptomycin. Media for cultivation of *T. vaginalis* basically provide essential salts, nutrients, reducing agents and antibiotics to inhibit bacterial growth in the absence or in low concentration of oxygen. This medium was further modified without agar and methylene blue. Under strictly anaerobic conditions, this medium supports growth from a single protozoan. Under aerobic conditions, massive inocula are required. *T. vaginalis* is an anaerobe and contains no catalase.

COMPOSITION

Ingredients	Gms / Ltr
Peptic digest of animal tissue	32.000
Liver digest	20.000
Maltose	1.600
L-Cystine hydrochloride	2.400
Ringer's Solution 1/4th strength	1000.0(QS)

PRINCIPLE

Peptic digest of animal tissue and liver digest in the medium provide nitrogenous compounds and other essential nutrients. Lcystine hydrochloride acts as a reducing agent. Cystine is not essential when cultures are incubated anaerobically but it assists the maintenance of anaerobiosis. The antibiotics inhibit bacterial growth and supports growth from a single protozoon under strictly anaerobic conditions.

INSTRUCTION FOR USE

- Dissolve 56 grams in 900 ml distilled water. Heat if necessary to dissolve the medium completely.
- Distribute in bottles in 90 ml amounts and sterilize by autoclaving at 10 psi pressure (115°C) for 10 minutes.
- Cool to 50°C and aseptically add the following (per 90 ml of medium) –

1. Sterile inactivated Horse Serum.
2. Sterile Penicillin Streptomycin Solution.
3. Sterile Nystatin Solution.

Mix thoroughly and distribute in suitable aliquots with sterile precautions.

Penicillin Streptomycin solution:

Penicillin	:	1 x 10^5 units
Streptomycin	:	0.1 g
Sterile distilled water	:	10 ml

Nystatin Solution:
Nystatin : 5 x 10^4 units
Sterile distilled water : 10 ml

The addition of antibiotics is not necessary for routine subcultures but is essential for clinical diagnostic cultures and for isolating axenic cultures. Nystatin can be omitted unless yeast or fungal contaminants are suspected.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder : Cream to yellow homogeneous free flowing powder.
Appearance of prepared medium : Brownish yellow coloured clear solution without any precipitate.
pH (at 25°C) : 6.0±0.2

INTERPRETATION

Cultural characteristics observed after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Incubation Temperature	Incubation Period
Trichomonas vaginalis	30001	10-100	Good-luxuriant	35-37°C	4 Days

PACKAGING:

In pack size of 500 gm bottles.

STORAGE

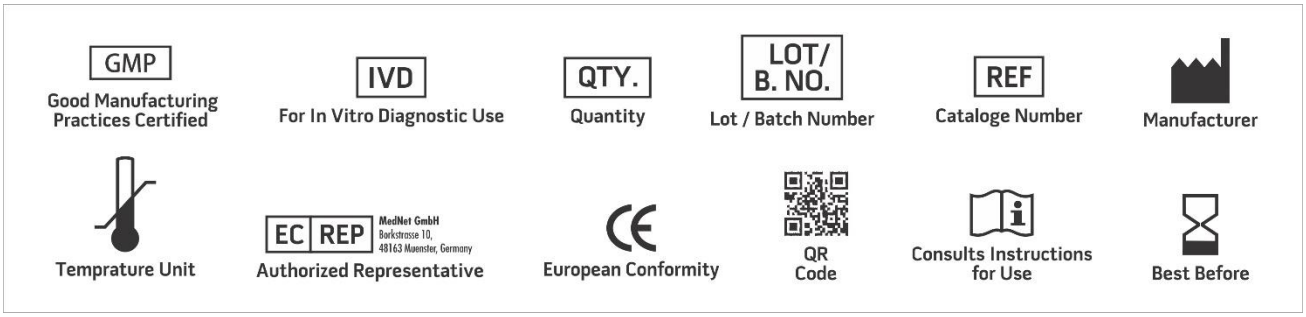
Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 10-25°C and protect from direct sunlight. Under optimal conditions, the medium has a shelf life of 4 years. When the container is opened for the first time, note the time and date on the label space provided 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. Johnson G. and Trussell R. E., 1943, Proc. Soc. Exp. Biol., 54:245.
2. Mackie and McCartneys Practical Medical Microbiology, 1989, 13th Ed. , Vol. 2, Churchill Livingstone, London.



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

***For Lab Use Only**

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