

CM 21,273 - MYCOPLASMA SYNOVIAE MEDIUM BASE

INTENDED USE

For cultivation of avian strains of Mycoplasma.

PRODUCT SUMMARY AND EXPLANATION

Genus *Mycoplasma* belongs to the class Mollicutes characterized by absence of cell wall, small genome and low G + C content, and were first recognized from a case of pleuropneumonia in a cow. The organism was designated "pleuropneumonia-like organism", or PPLO. For the cultivation of Mycoplasma, the medium ingredients and all the supplements should be free of any toxic substances even in small amounts. Calf brain infusion from, beef heart infusion from and proteose peptone provide nitrogen, vitamins, amino acids and carbon sources. Sodium chloride maintains the osmotic balance. Many Mycoplasma require serum for their good growth and also presence of antibiotic is necessary to prevent the growth of contaminating organisms. Mostly the Mycoplasma species are aerobic or facultatively anaerobic but some are microaerophilic. Few are anaerobic saprophytic Mycoplasma which grow best at 22-35°C while pathogenic strains grow at 35°C.

COMPOSITION

Ingredients	Gms / Ltr
Calf brain, infusion from	200.000
Beef heart, infusion from	250.000
Proteose peptone	10.000
Sodium chloride	5.000
Disodium phosphate	2.500
Dextrose	2.000
Yeast autolysate	5.000
Tris buffer	0.250
2,3,5-Triphenyl tetrazolium chloride	0.050

PRINCIPLE

Mycoplasma Synoviae Medium contains yeast autolysate which is a rich source of Nicotinamide Adenine Dinucleotide (NAD) required by Mycoplasma synoviae. Calf brain and beef heart infusion along with the proteose peptone provide organic nitrogen, carbon, sulphur, vitamins and trace elements. Tris buffer and disodium phosphate buffers the medium. Horse serum provides growth factors including lipid compounds to Mycoplasma. TTC helps to identify TTC reducing Mycoplasmas. Penicillin and thallium acetate are added to the medium to inhibit bacterial growth.

INSTRUCTION FOR USE

Dissolve 42.3 grams in 900 ml distilled water.

Mix well to dissolve the medium completely.

Sterilize by filtration and aseptically add 100 ml sterile Horse Serum and 1,000,000 units Penicillin and 0.25 gram thallium acetate.

Mix well before dispensing.

QUALITY CONTROL SPECIFICATIONS



Appearance of Powder : Cream to yellow homogeneous free flowing powder. :
Appearance of prepared medium Yellow coloured clear to slightly opalescent solution.
pH (at 25°C) : 8.0±0.2

INTERPRETATION

Cultural characteristics observed in presence of 10% Carbon dioxide (CO₂), with added sterile Horse Serum and 1,000,000 units Penicillin and 0.25gram thallium acetate, after an incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Incubation Temperature	Incubation Period
Mycoplasma gallinarium	19708	50-100	Good-luxuriant	35-37°C	36-72 Hours
Mycoplasma synoviae	25204	50-100	Good-luxuriant	35-37°C	36-72 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

- Forbes.A. B., Sahm D. F., 2002, Bailey and Scott's Diagnostic Microbiology, 11th Ed., The C.V. Mosby Co., St. Louis.
- Bauriaud R., Seror C., Lareng M. B., Lefevre J. C., 1992, Pathologie Biologie, 40, 479-482.

 GMP Good Manufacturing Practices Certified	 IVD For In Vitro Diagnostic Use	 QTY. Quantity	 LOT/ B. NO. Lot / Batch Number	 REF Catalogue Number	 Manufacturer
 Temperature Unit	 EC REP Authorized Representative	 CE 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

