CM 20,029 – ACTINOMYCES BROTH

INTENDED USE

For cultivation and maintenance of anaerobic Actinomyces species.

PRODUCT SUMMARYAND EXPLANATION

Actinomycetes are gram positivebacteria which show marked chemical and morphological diversity but form a distinct evolutionary line of organisms that range from coccoid and pleomorphic forms to branched filaments. Actinomycetes form an integral part of soil, water and vegetation. Actinomycete development leads to the formation of volatile metabolites. Traces of these volatile metabolites are sufficient to impart disagreeable odour to water or a muddy flavour to fish. Actinomycetes also cause disruptions in wastewater treatment by forming massive growths, which are capable of producing thick foam in the activated sludge process Actinomyces Broth is a modification of the Maintenance Medium formulated by Pine and Watson. Actinomyces Broth is further modified and is recommended for the cultivation and maintenance of anaerobic Actinomycete species.

COMPOSITION

Ingredients	Gms / Ltr
Beef heart infusion solids	10.000
Tryptose	10.000
Casein enzymic hydrolysate	4.000
Yeast extract	5.000
Dextrose	5.000
L-Cysteine hydrochloride	1.000
Starch, soluble	1.000
Sodium chloride	5.000
Monopotassium phosphate	15.000
Ammonium sulphate	1.000
Magnesium sulphate	0.200
Calcium chloride anhydrous	0.020

PRINCIPLE

ActinomycesBroth contains beef heart infusion, casein enzymic hydrolysate, yeast extract, starch and dextrose, which act as sources of carbon, nitrogen, sulphur, vitamins and other essential growth factors. The metallic salts provide essential electrolytes and minerals.

INSTRUCTION FOR USE

Dissolve 57.22 grams in 1000 ml distilled water.
Heat if necessary to dissolve the medium completely.
Distribute into tubes or flasks.
Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder : Cream to yellow homogeneous free flowing powder.
Appearance of prepared medium : Yellow to light amber coloured slightly opalescent solution with a slight precipitate forms in tubes.
pH (at 25°C) : 7.2±0.2

INTERPRETATION

Culturalcharacteristics observed after incubation. (incubated anaerobically)

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Incubation Temperature	Incubation Period
Actinomyces israelii	10049	10-100	Luxuriant	25-30°C	40-72 Hours
Streptomyces achromogenes	12767	50-100	Good	25-30°C	40-72 Hours
Streptomyces albus subsp albus	3004	50-100	Good	25-30°C	40-72 Hours
Streptomyces lavendulae	8664	50-100	Good	25-30°C	40-72 Hours
Actinomyces bovis	13683	10-100	Good	25-30°C	40-72 Hours

PACKAGING:

Inpacksizeof500 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

Afteruse,prepared plates, specimen/sample containers and other contaminated materials must be sterilized before discarding.

REFERENCES

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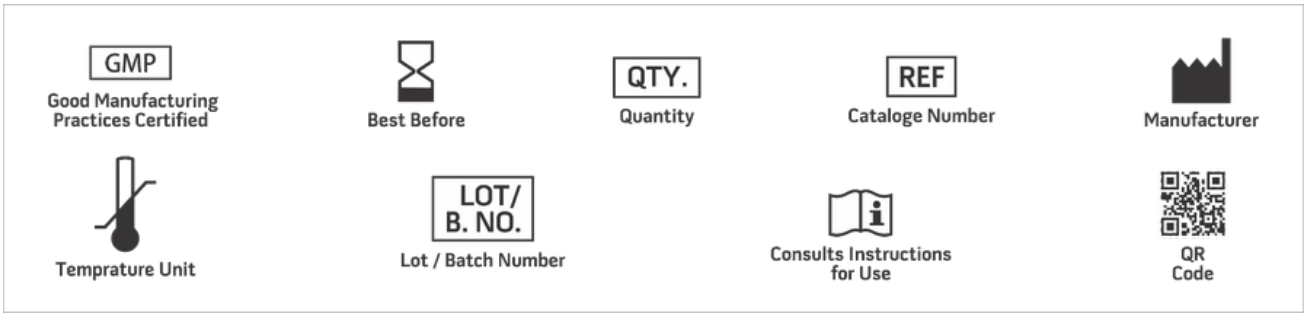

NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices.

*For LabUse Only