

Product Data Sheet

ACTINOMYCES BROTH

Product No. GB-DCM-00013-1A

INTENDED USE

For cultivation and maintenance of anaerobic Actinomyces species.

Product Description

Actinomycetes are gram positive bacteria 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.

Product Specifications

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

Actinomyces Broth 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.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder: Cream to yellow homogeneous free flowing powder. **Appearance 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

Microorganism	ATCC	Inoculum (CFU)	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

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.

DISPOSAL

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

This product is for research use only.