

CM 21518 – ROSE BENGAL AGAR W/ CHLORTETRACYCLINE

INTENDED USE

For theselectiveisolation and enumeration of yeasts and moulds.

PRODUCT SUMMARY AND EXPLANATION

Rose BengalAgar Baseisa modification of the Rose Bengal Chlortetracycline Agar formula of Jarvis. Of the antibiotics most frequently employed in media of neutral pH, Chloramphenicol is recommended because of its heat stability and broad antibacterial spectrum. Rose Bengal Agar media are recommended in standard methods for the enumeration of yeasts and molds from food stuffs and water.

The use of media with an acid pH that selectively inhibits the growth of bacteria and thereby promotes the growth of fungi has been widely employed. A number of investigators have reported, however, that acidified media may actually inhibit fungal growth, fail to completely inhibit bacterial growth and have little effect in restricting the size of mould colonies. Smith and Dawson used rose bengal in a neutral pH medium for the selective isolation of fungi from soil samples. Chloramphenicol, streptomycin, oxytetracycline and chlortetracycline have been used for the improved, selective isolation and enumeration of yeasts and molds from soil, sewage and foodstuffs.

COMPOSITION

Ingredients	Gms / Ltr
Peptone, special	5.000
Dextrose	10.000
Monopotassium phosphate	1.000
Magnesium sulphate	0.500
Rose bengal	0.050
Agar	15.000

PRINCIPLE

The medium consists of Peptone special which provides the carbon and nitrogen sources required for good growth of a wide variety of organisms. Dextrose is an energy source. Monopotassium phosphate provides buffering capability. Magnesium sulfate provides necessary trace elements. Rose bengal is included as a selective agent that inhibits bacterial growth and restricts the size and height of colonies of the more rapidly growing molds.

The restriction in growth of moulds aids in the isolation of slow-growing fungi by preventing overgrowth by more rapidly growing species. Rose bengal is taken up by yeast and mold colonies, thereby facilitating their recognition and enumeration. Chlortetracycline Selective Supplement is an antimicrobial supplement containing Chlortetracycline, which inhibits bacteria.

INSTRUCTION FOR USE

Dissolve 31.55 grams in 1000 ml distilled water.

Heat to boiling to dissolve the medium completely.

Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.

Cool to 40-45°C and aseptically add the rehydrated contents of 1 vial of Chlortetracycline Selective Supplement to the medium.

Mix thoroughly and pour into sterile Petri plates.



QUALITY CONTROL SPECIFICATIONS

Appearance of Powder	: Light yellow to pink homogeneous free flowing powder.
Appearance of prepared medium	: Deep pink coloured clear to very slightly opalescent gel forms in Petri plates.
pH (at 25°C)	: 7.2 ± 0.2

INTERPRETATION

Cultural characteristics observed after incubation with added Chlortetracycline Selective Supplement.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Incubation Temperature	Incubation Period
Aspergillus niger	16404	10-100	Good-luxuriant	≥50%	25°C	5 Days
Bacillus subtilis	6633	≥10 ³	Inhibited	0%	25°C	5 Days
Cladosporium cladosporioides	45534	10-100	Good-luxuriant	≥50%	25°C	5 Days
Escherichia coli	25922	≥10 ³	Inhibited	0%	25°C	5 Days
Enterococcus faecalis	29212	≥10 ³	Inhibited	0%	25°C	5 Days
Mucor racemosus	42647	10-100	Good-luxuriant	≥50%	25°C	5 Days
Penicillium notatum	10108	10-100	Good-luxuriant	≥50%	25°C	5 Days
Saccharomyces cerevisiae	9763	10-100	Good-luxuriant	≥50%	25°C	5 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 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

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5. Martin. 1950. Soil Sci. 69:215.
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7. Smith and Dawson. 1944. Soil Sci. 58:467.
8. Cooke. 1954. Antibiot. and Chemother. 4:657.
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14. Banks, Board and Paton. 1985. Lett. Appl. Microbiol. 1:7.

 Good Manufacturing Practices Certified	 Best Before	 Quantity	 Catalogue Number	 Manufacturer
 Temperature Unit	 Lot / Batch Number	 Consults Instructions for Use	 QR Code	

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

*For LabUse Only