

TM 1175 – EMERSON AGAR

INTENDED USE

For cultivation of *Actinomycetaceae*, *Streptomycetaceae* and molds.

PRODUCT SUMMARY AND EXPLANATION

Emerson Agar was originally formulated by Emerson et al and is used for the cultivation of moulds and bacterial species resembling moulds. This medium was further modified by Gottlieb et al and is used for screening potent antibiotic producing organisms. In their study, they stored *Streptomyces* in soil for long time and transferred them as needed, to slants of Emerson Agar. The slant cultures were incubated for 3-7 days. The spores were gently scraped from the cultures surface to form a spore inoculum.

COMPOSITION

Ingredients	Gms / Ltr
Beef extract	4.000
Yeast extract	1.000
Peptone	4.000
Dextrose (Glucose)	10.000
Sodium chloride	2.500
Agar	20.000

PRINCIPLE

The medium consists of Yeast extract which provides a source of trace elements, vitamins and amino acids. For the selective isolation of *Streptomyces* species, cycloheximide is incorporated in the medium, which limits the growth of moulds. This medium is also used for routine cultivation and maintenance of pure cultures.

INSTRUCTION FOR USE

- Dissolve 41.5 grams in 1000 ml purified / distilled water.
- Heat to boiling to dissolve the medium completely.
- Add 0.05 grams / litre cycloheximide, if desired. Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.
- Mix well and pour into sterile Petri plates.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder	: Cream to yellow homogeneous free flowing powder.
Appearance of prepared medium	: Light amber coloured, clear to slightly opalescent gel forms in Petri plates.
pH (at 25°C)	: 7.0 ± 0.2

INTERPRETATION

Cultural characteristics observed after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Incubation Temperature	Incubation Period



<i>Aspergillus brasiliensis</i>	16404	10-100	Luxuriant	>=70%	30°C	48-72 Hours
<i>Saccharomyces cerevisiae</i>	9763	10-100	Luxuriant	>=70%	30°C	48-72 Hours
<i>Streptomyces albus subsp albus</i>	3004	50-100	Luxuriant	>=70%	30°C	48-72 Hours
<i>Streptomyces lavendulae</i>	8664	50-100	Luxuriant	>=70%	30°C	48-72 Hours
<i>Streptomyces achromogenes</i>	12767	50-100	Luxuriant	>=70%	30°C	48-72 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

- Emerson R. L., Whiffen A. J., Bohonos M. and DeBoer C., 1946, J. Bacteriol., 52:357.
- Gottlieb D., Bhattacharya P. K., Anderson H. W. and Carter H. E., 1948, J. Bacteriol., 55:409.
- Haynes W. C., Wickerham L. J. and Hesseltine C. W., 1955, Appl. Microbiol., 3:361.
- Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition.
- Jorgensen, J.H., Pfaller, M.A., Carroll, K.C., Funke, G., Landry, M.L., Richter, S.S and Warnock., D.W. (2015) Manual of Clinical Microbiology, 11th Edition. Vol. 1.
- Schmitz H. and Woodside R., 1955, Antibiot. Chemother., 5:652.



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 MedNet GmbH Baukstrasse 10, 49163 Muenster, Germany Authorized Representative	 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**
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