

TM 1176 – EMERSON YSS AGAR

INTENDED USE

For isolation of *Actinomyces* and other fungi.

PRODUCT SUMMARY AND EXPLANATION

Fungi were among the first microorganisms recognized because some of the fruiting structures, such as the mushrooms, are large enough to be seen without a microscope. Fungi are extremely successful organisms, as evidenced by their ubiquity in nature. They are an important component in the energy cycle where they function as decomposers. *Actinomyces* are distributed worldwide, found as part of the indigenous microflora found in soil, mud etc. and also as parasites of humans and other animals.

Emerson YSS (Yeast Soluble Starch) Agar recommended for the isolation of *Actinomyces* and other fungi was formulated by Emerson. This medium was used in half strength by Emerson and Wilson to obtain single germlings from zygotes or zoospores.

COMPOSITION

Ingredients	Gms / Ltr
Soluble starch	15.000
Yeast extract	4.000
Dipotassium hydrogen phosphate	1.000
Magnesium sulphate	0.500
Agar	20.000

PRINCIPLE

The medium consists of Yeast extract which serves as a source of B-complex vitamins, amino acids and essential nutrients. Soluble starch serves as a source of energy and carbon. It also neutralizes the toxic metabolites formed. Phosphates buffer the medium whereas magnesium sulphate acts as a source of ions and sulphates.

INSTRUCTION FOR USE

- Dissolve 40.50 grams in 1000 ml purified / distilled water. If desired, half strength medium can be prepared using 20.25 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 45-50°C.
- Mix well and pour into sterile Petri plates.

QUALITY CONTROL SPECIFICATIONS

- Appearance of Powder** : Cream to pink homogeneous free flowing powder.
- Appearance of prepared medium** : Light to medium amber coloured, opalescent gel with a slight flocculant precipitate 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	40-72 Hours
<i>Saccharomyces cerevisiae</i>	9763	10-100	Luxuriant	>=70%	30°C	40-72 Hours
<i>Saccharomyces uvarum</i>	28098	10-100	Luxuriant	>=70%	30°C	40-72 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, 1941, Lloydia, 4:77.
- Emerson and Wilson, 1954, Mycologia, 46:393.
- 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.
- Murray P. R., Baron J. H., Pfaller M. A., Jorgensen J. H. and Tenover F. C., (Ed.), 2003, Manual of Clinical Microbiology, 8th Ed., American Society for Microbiology, Washington, D.C.

 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 <small>MedNet GmbH Baukstrasse 10, 48163 Münster, Germany</small>	 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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