

TM 243 – OAT MEAL AGAR

INTENDED USE

For cultivation of fungi particularly for macrospore formation.

PRODUCT SUMMARY AND EXPLANATION

Fungi are multicellular heterotropic members of the plant kingdom that lack roots and stems and are referred to as thallophytes. They are larger than the bacteria and more complex in their morphology. The form of sporulation and the type of spore are important criteria in the identification of various fungi. Fungi are extremely successful organisms, as evidenced by their ubiquity in nature. Identification and classification of fungi is primarily based on the morphologic differences in their reproductive structures. Fungi reproduce sexually or asexually or by both means. Sexual reproduction is associated with the formation of specialized structures that facilitate fertilization and nuclear fission, resulting in the production of specialized spores. Large, multicelled spores are called macro conidia, macrospores and are produced by aerial sporulation. Imperfect fungi are those in which no sexual phase has been demonstrated. The spores are produced directly or from the mycelium.

COMPOSITION

Ingredients	Gms / Ltr		
Oat Meal	60.000		
Agar	12.500		

PRINCIPLE

The medium consists of Oat Meal which is a source of nitrogen, carbon, protein and nutrients necessary for the growth of fungi.

INSTRUCTION FOR USE

- Dissolve 72.5 grams in 1000 ml purified / distilled water.
- Heat to boiling to dissolve the medium completely.
- Sterilize by autoclaving at 15 psi pressure (121°C) for 15 min. Cool to 45-50°C.
- Mix well and pour into sterile Petri plates.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder : Cream to yellow homogeneous powder or soft lumps which can be easily broken

down to powder.

Appearance of prepared medium : Brownish yellow coloured opaque gel with some suspended particles forms in

Petri plates.

pH (at 25°C) : 7.2 ± 0.2

INTERPRETATION

Cultural characteristics observed after incubation.











Microorganism	АТСС	Inoculum (CFU/ml)	Growth	Recovery	Incubation Temperature	Incubation Period
Saccharomyces cerevisiae	9763	10-100	Luxuriant	>=70%	25-30°C	18-48 Hours
Candida albicans	10231	10-100	Luxuriant	>=70%	25-30°C	18-48 Hours
Aspergillus brasiliensis	16404	10-100	Luxuriant	>=70%	25-30°C	18-48 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.

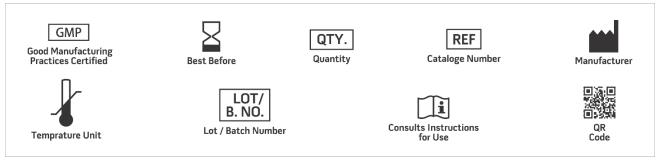
Product Deterioration: Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

DISPOSAL

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

REFERENCES

- 1. 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.
- 2. Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition.
- 3. Koneman E. W., Allen S. D., Janda W. M., Schreckenberger P. C. and Winn W. C. Jr., 1997, Colour Atlas and Textbook of Diagnostic Microbiology, 5th Ed., Lippincott- Raven Publishers, Philadelphia, Pa.
- 4. Murray P. R., Baron E. J., Jorgensen J. H., Pfaller M. A., Yolken R. H., (Eds.), 8th Ed., 2003, Manual of Clinical Microbiology, ASM, Washington, D.C.
- 5. Salfinger Y., and Tortorello M.L., 2015, Compendium of Methods for the Microbiological Examination of Foods, 5th Ed., American Public Health Association, Washington, D.C.



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















*For Lab Use Only Revision: 08 Nov., 2019









