Water Agar

M1366

Water Agar is recommended for enumeration, cultivation and observation of sporulation of some fungi.

Composition**

Ingredients	Gms / Litre
Agar	20.000

**Formula adjusted, standardized to suit performance parameters

Directions

Suspend 20.00 grams in 1000 ml distilled water. Heat to boiling to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Dispense as desired.

Principle And Interpretation

The growth of fungi may result in several kinds of food-spoilage i.e. off-flavors, toxins, discoloration, rotting, and formation of pathogenic or allergenic propagules. Over the past 40 years fungi in foods have received special attention because of their ability to produce toxic metabolites. Water Agar is often recommended for enumeration, cultivation and observation of sporulation of some fungi (1). Direct Plating is considered to be one of the most effective techniques for mycological examination of all foods (2). Water Agar is used for enumeration of fungi according to MPN method.

Successful isolation of the fungi can be achieved by the use of selective media that slow down the growth of the fungi. Most fungi and bacteria will grow on Water Agar, but at such a slow rate that it is relatively easy to isolate the target fungus. The simple formulation of the medium allows for easy observation of sporulation.

Quality Control

Appearance
White to cream homogeneous free flowing powder

Gelling
Firm, comparable with 2.0% Agar gel.

Colour and Clarity of prepared medium
White coloured clear to slightly opalescent gel forms in Petri plates.

Cultural Response
M1366: Cultural characteristics observed after an incubation at 1)35- 37°C for bacteria and 2)25-30°C for fungus, after 48-72 hours.

Organism	Growth Cultural Response
Candida albicans ATCC 10231	fair-good
Saccharomyces cerevisiae ATCC 9763	fair-good
Escherichia coli ATCC 25922	fair
Pseudomonas aeruginosa ATCC 27853	fair

Storage and Shelf Life

Store below 30°C in tightly closed container and the prepared medium at 2 - 8°C. Use before expiry date on the label.

Reference

1. Atlas R. M., 1996, Handbook of Microbiological Media, 2nd Ed., CRC Press, New York.

2. Samson R. A., Hoekstra E. S., Lund F., Filtenborg O. and Frisvad J. C., Methods for the Detection, Isolation and Characterization of Food-borne Fungi, Central bureau voor Schimmelcultures, Utrecht, The Netherlands and BioCentrum-DTU, Technical University of Denmark, DK-2800 Lyngby, Denmark.

Revision : 02 / 2015