



## V 8 Juice Agar

M638

V 8 Juice Agar is recommended for the cultivation of yeasts and moulds.

### Composition\*\*

| Ingredients         | Gms / Litre |
|---------------------|-------------|
| V-8 juice (100 ml)  | 8.300       |
| L-Asparagine        | 10.000      |
| Yeast extract       | 2.000       |
| Calcium carbonate   | 2.000       |
| Glucose             | 2.000       |
| Agar                | 20.000      |
| Final pH ( at 25°C) | 5.7±0.2     |

\*\*Formula adjusted, standardized to suit performance parameters

### Directions

Suspend 44.3 grams in 1000 ml of distilled water. Heat just to boiling. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. If slight precipitate appears after sterilization distribute evenly before dispensing.

Note: Due to presence of calcium carbonate, the prepared medium forms opalescent solution with white precipitate.

### Principle And Interpretation

Yeasts are unicellular, eukaryotic, budding cells that are generally round oval or elongate in shape (1). They multiply principally by the production of blastoconidia (buds) (1). Yeast colonies are moist and creamy or glabrous to membranous in texture and are considered opportunistic pathogens. Moulds are microscopic, plant-like organisms, composed of long filaments called hyphae. Both are widely distributed in soil, water and air. Cultivation of yeasts and moulds becomes important in fermentation studies where they are generally used as starter cultures (2). The vegetable juices provide the necessary trace ingredients required to stimulate fungal growth.

Yeast extract provides essential growth nutrients. L-Asparagine serves as the amino acid source and glucose as the carbohydrate source for the growth of yeasts and moulds. V-8 juice is blend of 8 vegetable juices, which supplies the trace ingredients to stimulate the growth of fungi. The acidic pH of the medium favors fungal growth and suppresses bacterial growth.

### Quality Control

#### Appearance

Off-white to yellow homogeneous free flowing powder

#### Gelling

Firm, comparable with 2.0% Agar gel.

#### Colour and Clarity of prepared medium

Light amber coloured slightly opalescent gel forms in Petri plates.

#### Reaction

Reaction of 4.43% w/v aqueous solution at 25°C. pH : 5.7±0.2

#### pH

5.50-5.90

#### Cultural Response

Cultural characteristics observed after an incubation at 25-30°C for 48-72 hours.

| Organism | Inoculum<br>(CFU) | Growth |
|----------|-------------------|--------|
|----------|-------------------|--------|

Cultural Response

|   |        |           |
|---|--------|-----------|
| * <i>Aspergillus brasiliensis</i><br>ATCC 16404 | 50-100 | luxuriant |
| <i>Candida albicans</i> ATCC<br>10231           | 50-100 | luxuriant |
| <i>Saccharomyces cerevisiae</i><br>ATCC 9763    | 50-100 | luxuriant |

*Key : Formerly known as Aspergillus niger*

### Storage and Shelf Life

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

### Reference

- 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.
- 2.Rechcigl, Jr. (Ed.), 1978, CRC Handbook Series in Nutrition and Food, Vol. III, CRC Press Inc.

Revision : 02 / 2015

### Disclaimer :

User must ensure suitability of the product(s) in their application prior to use. Products conform solely to the information contained in this and other related HiMedia™ publications. The information contained in this publication is based on our research and development work and is to the best of our knowledge true and accurate. HiMedia™ Laboratories Pvt Ltd reserves the right to make changes to specifications and information related to the products at any time. Products are not intended for human or animal or therapeutic use but for laboratory, diagnostic, research or further manufacturing use only, unless otherwise specified. Statements contained herein should not be considered as a warranty of any kind, expressed or implied, and no liability is accepted for infringement of any patents.