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 (CFU)	Growth

Cultural Response

**Aspergillus brasiliensis ATCC 16404*	50-100	luxuriant
Candida albicans ATCC 10231	50-100	luxuriant
Saccharomyces cerevisiae 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 Yolken R. H., (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.

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