

## TM 2413 - V-8 JUICE AGAR

### INTENDED USE

For the cultivation of yeasts and moulds.

### PRODUCT SUMMARY AND EXPLANATION

Yeasts are unicellular, eukaryotic, budding cells that are generally round oval or elongate in shape. They multiply principally by the production of blastoconidia (buds). 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. The vegetable juices provide the necessary trace ingredients required to stimulate fungal growth.

### COMPOSITION

Ingredients	Gms / Ltr
V-8 juice	8.300
L-Asparagine	10.000
Yeast extract	2.000
Calcium carbonate	2.000
Glucose	2.000
Agar	20.000

### PRINCIPLE

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 molds. 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.

### INSTRUCTION FOR USE

- Dissolve 44.3 grams in 1000 ml of distilled water.
- Heat just to boiling. Sterilize by autoclaving at 15 psi 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.

### QUALITY CONTROL SPECIFICATIONS

<b>Appearance of Powder</b>	: Off-white to yellow homogeneous free flowing powder.
<b>Appearance of prepared medium</b>	: Light amber coloured slightly opalescent gel forms in Petri plates.
<b>pH (at 25°C)</b>	: 5.7±0.2

### INTERPRETATION

Cultural characteristics observed after an incubation.



Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Incubation Temperature	Incubation Period
<i>Aspergillus brasiliensis</i>	16404	10-100	Luxuriant	>=70%	25-30°C	48-72 Hours
<i>Candida albicans</i>	10231	10-100	Luxuriant	>=70%	25-30°C	48-72 Hours
<i>Saccharomyces cerevisiae</i>	9763	10-100	Luxuriant	>=70%	25-30°C	48-72 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.

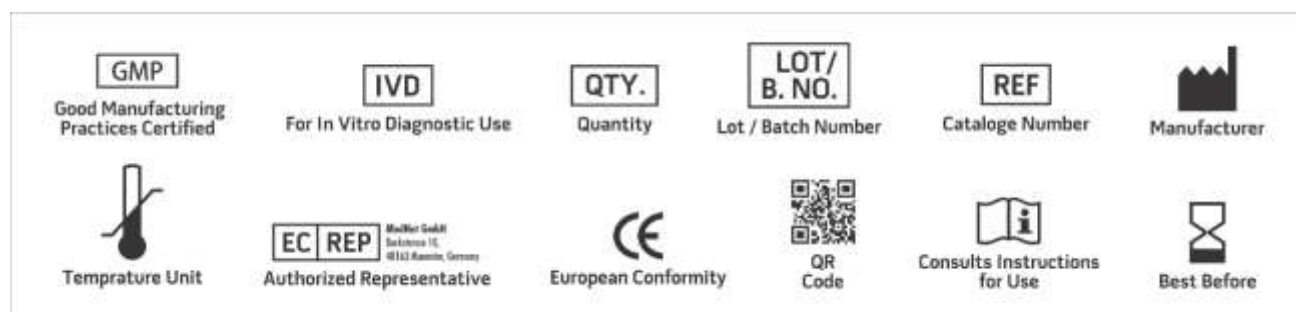
**Product Deterioration:** Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

#### DISPOSAL

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

#### REFERENCES

- Murray P. R., Baron J. H., Pfaller M. A., Tenover J. C. and Tenover F. C., (Eds.), 2003, Manual of Clinical Microbiology, 8th Ed., American Society for Microbiology, Washington, D.C.
- Rehcgil, Jr. (Ed.), 1978, CRC Handbook Series in Nutrition and Food, Vol. III, CRC Press Inc.



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

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

