CM 20533 – CZAPEK YEAST AUTOLYSATE AGAR (CYA AGAR)

INTENDED USE

For the isolationand cultivation of heat resistant filamentous fungi (molds) from foods.

PRODUCT SUMMARY AND EXPLANATION

CzapekYeast Autolysate Agar supports thegrowth of organisms which are able to utilize sodium nitrate as the sole source of nitrogen. It is also used for the cultivation and maintenance of numerous fungal species and also for chlamydospore production by Candida albicans. The medium has been recommended by various authors for studies of Aspergillus, Penicillium and Actinomycetes.

COMPOSITION

Ingredients	Gms / Ltr
Sucrose	30.000
Yeast extract	5.000
Sodium nitrate	3.000
Dipotassium hydrogen phosphate	1.000
Potassium chloride	0.500
Magnesium sulphate,heptahydrate	0.500
Ferrous sulphate, heptahydrate	0.010
Agar	15.000

PRINCIPLE

Sodiumnitrate is the sole source of nitrogen while sucrose is the sole source of carbon. Magnesium glycerophosphate and potassium sulphate help in chlamydospore production by C.albicans.

INSTRUCTION FORUSE

Dissolve 54.75 grams(the equivalent weight of dehydrated medium per litre) in 1000 ml distilled water.
Heat to boiling to dissolve the medium completely.
Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.
Mix well and pour into sterile Petri plates.
If low pH is desired, acidify the media upto 3.0 -4.0 by the addition of 10% Lactic acid Solution.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder	: White to light yellow homogeneous free flowing powder.
Appearance of prepared medium	: Light yellow coloured, clear to slightly opalescent gel forms in Petri plates.
pH (at 25°C)	: 7.3±0.2

INTERPRETATION

Culturalcharacteristics observed after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Incubation Temperature	Incubation Period
Aspergillus fumigatus	1028	10-100	Luxuriant	>=70%	50°C	24-48 Hours
Aspergillus brasiliensis	16404	10-100	Luxuriant	>=70%	30°C	24-48 Hours
Candida albicans	10231	10-100	Luxuriant (chlamydospores formation)	>=70%	28°C	24-48 Hours
Pencillium notatum	10108	10-100	Luxuriant	>=70%	20 - 25°C	24-48 Hours
Saccharomyces cerevisiae	9763	10-100	Luxuriant	>=70%	25 - 30°C	24-48 Hours

PACKAGING:

Inpacksizeof500 gm bottles.

STORAGE

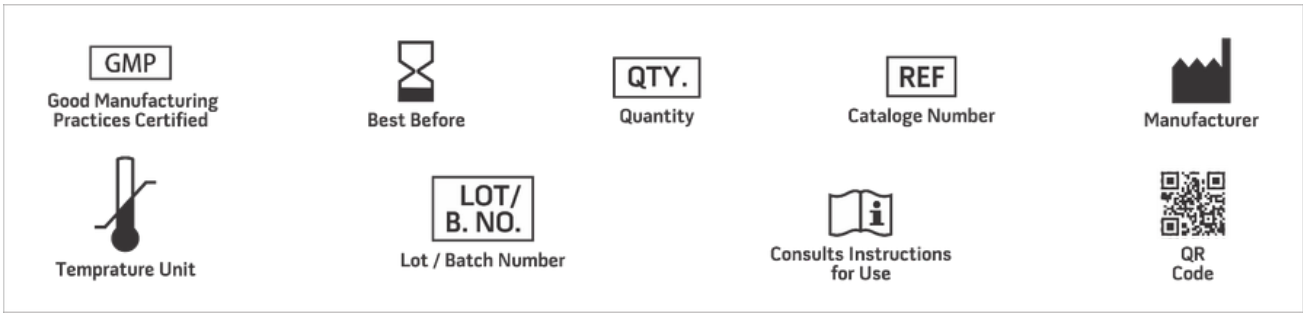
Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 25-30°C and protect from direct sunlight. Under optimal conditions, the medium has a shelf life of 4 years. When the container is opened for the first time, note the time and date on the label space provided 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

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

REFERENCES

1. Dawson and Christine O., 1962, Saboutaudia; 1:214.
2. Thom C. and Church M.B., 1926, The Aspergilli, Williams and Wilkins Co., Baltimore.
3. Thom C., 1930, The Penicillia, Williams and Wilkins Co., Baltimore.
4. Raper K.B. and Thom C., 1949, Manual of Penicillia, Williams and Wilkins Co., Baltimore.
5. Wakesman S.A., 1931, Principles of Soil Microbiology, Bailliere Thindall and Co., London.



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

*For LabUse Only