CM 20531 – CZAPEK DOX LIQUID MEDIUM

INTENDED USE

For cultivation of fungi and bacteria by utilizing sodium nitrate as a nitrogen source.

PRODUCT SUMMARY AND EXPLANATION

CzapekDox Agar, Modified 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 authours for studies of Aspergillus, Penicillium and Actinomycetes. Czapek Dox Liquid, Modified serves the same purpose as Czapek Dox Agar Modified.

COMPOSITION

Ingredients	Gms / Ltr
Sucrose	30.000
Sodium nitrate	2.000
Magnesium glycerophosphate	0.500
Potassium chloride	0.500
Dipotassium sulphate	0.350
Ferrous sulphate	0.010

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 FOR USE

Dissolve33.36 grams in 1000 ml purified / distilled water.
Heat if necessary to dissolve the medium completely.
Distribute into tubes and sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.

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 solution.
pH (at 25°C)	: 6.8±0.2

INTERPRETATION

Culturalcharacteristics observed after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Incubation Temperature	Incubation Period
Aspergillus fumigatus	1028	10-100	Luxuriant	50°C	24-48 Hours

Aspergillus brasiliensis	16404	10-100	Luxuriant	30°C	24-48 Hours
Candida albicans	10231	10-100	Luxuriant (chlamydospores formation)	28°C	24-48 Hours
Pencillium notatum	10108	10-100	Luxuriant	20-25°C	24-48 Hours
Saccharomyces cerevisiae	9763	10-100	Luxuriant	25-30°C	24-48 Hours

PACKAGING:

Inpacksizeof500 gm bottles.

STORAGE

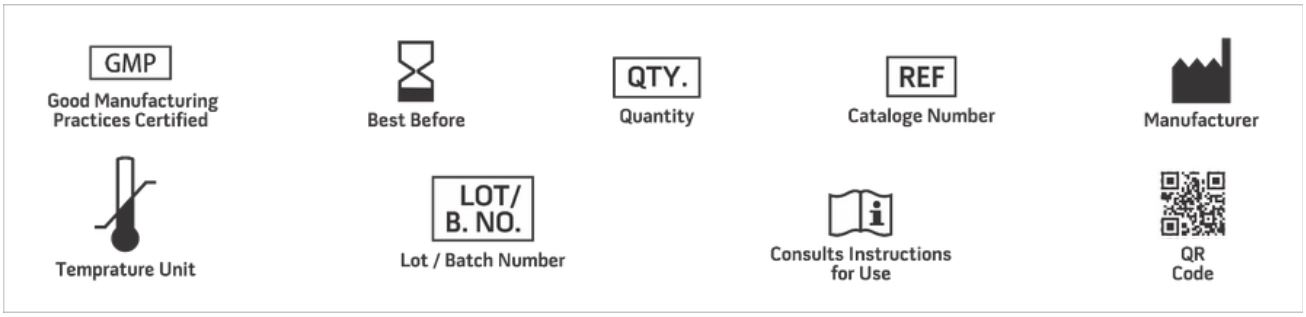
Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 25-30°C and protect from direct sunlight. Under optimal conditions, the medium has a shelf life of 4 years. When the container is opened for the first time, note the time and date on the label space provided 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. Raper K. B. and Thom C., 1949, Manual of Penicillia, Williams and Wilkins Co., Baltimore.
3. Thom C. and Church M. B., 1926, The Aspergilli, Williams and Wilkins Co., Baltimore.
4. Thom C., 1930, The 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