CM 20530 – CZAPEK DOX BROTH

INTENDED USE
Semisynthetic medium for cultivation of fungi.

PRODUCT SUMMARY AND EXPLANATION
Fungi,including yeasts andfilamentousspecies or moulds are ubiquitously distributed in nature. Czapek Dox Broth is a semi-synthetic medium used for the cultivation of fungi, containing sodium nitrate as the sole source of nitrogen. This medium is prepared according to the formula developed by Thom and Church, which has a defined chemical composition. Czapek Dox Broth is the modification of the original medium of Czapek Dox as per Thomas and Raper.

COMPOSITION

Ingredients	Gms / Ltr
Sucrose	30.000
Sodium nitrate	3.000
Dipotassium phosphate	1.000
Magnesium sulphate	0.500
Potassium chloride	0.500
Ferrous sulphate	0.010

PRINCIPLE
Sucroseserves as the sole source of carbon while sodium nitrate serves as the sole source of nitrogen. Dipotassium phosphate buffers the medium. Magnesium sulphate, potassium chloride, ferrous sulphate serves as sources of essential ions.

INSTRUCTION FOR USE
Dissolve 35.01grams in 1000 ml purified/ distilled water.
Heat if necessary to dissolve the medium completely.
Mix well and dispense into tubes or flasks as desired.
Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder	: Cream to yellow homogeneous free flowing powder.
Appearance of prepared medium	: Light yellow coloured, clear to slightly opalescent solution in tubes.
pH (at 25°C)	: 7.3±0.2

INTERPRETATION
Culturalcharacteristics observed after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Incubation Temperature	Incubation Period

Aspergillus brasiliensis	16404	10-100	Good-luxuriant	25-30°C	48-72 Hours
Candida albicans	10231	10-100	Good-luxuriant	25-30°C	48-72 Hours
Saccharomyces cerevisiae	9763	10-100	Good-luxuriant	25-30°C	48-72 Hours

PACKAGING:

Inpacksizeof100 gm and 500 gm bottles.

STORAGE

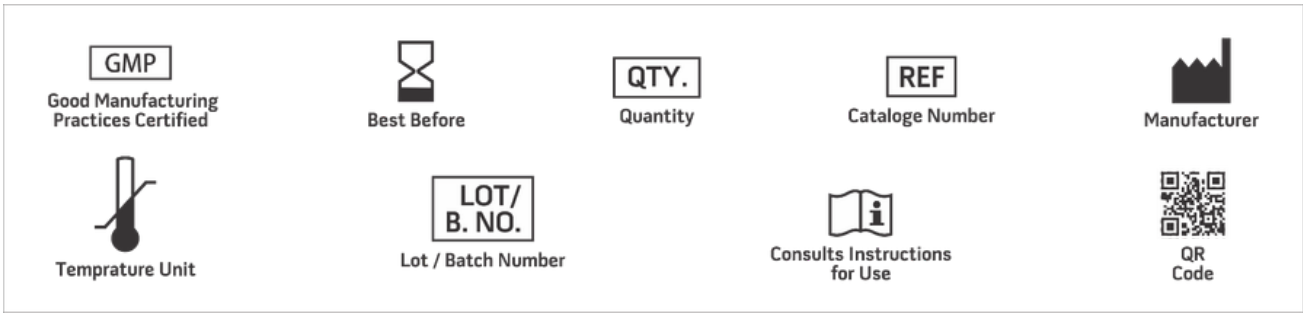
Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 25-30°C and protect from direct sunlight. Under optimal conditions, the medium has a shelf life of 4 years. When the container is opened for the first time, note the time and date on the label space provided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

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

REFERENCES

1. Baird R.B.,EatonA.D., and Rice E.W., (Eds.), 2015, Standard Methods for the Examination of Water and Wastewater, 23rd ed., APHA, Washington, D.C.
2. Czapek, 1920-1903, Bcitr. Chem. Physiol. Pathol., 1:540.
3. Dox, 1910, U.S. Dept. of Agr. Bur. Anim. Ind. Bull., 120:70.
4. Thom and Raper, 1945, Manual of Aspergilli, 39.



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

*For LabUse Only