TM 1852- DICHLORAN ROSE BENGAL CHLORAMPHENICOL AGAR (DRBC AGAR) (ISO 21527-1:2008, 11133:2014)

INTENDED USE

For selective isolation of yeasts and molds of significance in food spoilage.

PRODUCT SUMMARY AND EXPLANATION

DRBC Agar is a selective medium that supports good growth of yeasts and molds. This medium is formulated as described by King et. al and is recommended for selective isolation of fungi especially from food samples. DRBC Agar is a modification of Rose Bengal Chloramphenicol Agar which contains Dichloran as an additional component. The composition and performance criteria of this medium are as per the specifications laid down in ISO 21527-1:2008.

COMPOSITION

Ingredients	Gms / Ltr
Agar	15.000
Dextrose	10.000
Peptic digest of animal tissue	5.000
Mono potassium phosphate	1.000
Magnesium sulphate	0.500
Chloramphenicol	0.100
Rose bengal	0.025
Dichloran	0.002

PRINCIPLE

Medium contains Peptic digest of animal tissue which serves as a source of nitrogen, vitamins and minerals. Dextrose is a carbon and energy source. Magnesium sulfate provides divalent cations and sulfate. Monopotassium phosphate is a buffering agent. Dichloran is an antifungal agent used to reduce the colony diameter of spreading fungi. The presence of rose 1engal in the medium suppresses the growth of bacteria and restricts the size and colonies of the more rapidly growing molds. Chloramphenicol is included to inhibit the growth of bacteria present in environmental and food samples. Inhibition of growth of bacteria and restriction of spreading of more-rapidly growing molds aids in the isolation of slow-growing fungi by preventing their overgrowth by more-rapidly growing species. Additionally, Rose Bengal is taken by yeast and molds colonies, which allows these colonies to be easily recognized and enumerated.

INSTRUCTION FOR USE

- Dissolve 31.62 grams in 1000ml distilled water.
- Gently heat to boiling with swirling to dissolve the medium completely.
- Sterilize by autoclaving at 15 psi (121°C) for 15 minutes.
- Cool to 45-50°C.
- Mix well and pour into sterile Petri plates.

QUALITY CONTROL SPECIFICATIONS

Appearance of Dehydrated powder : Light yellow to pink, Homogeneous free flowing powder
Appearance of Prepared medium : Pink coloured, clear to slightly opalescent gel
pH (at 25°C) : 5.6± 0.2

INTERPRETATION

Cultural characteristics observed after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Incubation Temperature	Incubation Period
Aspergillus brasiliensis	16404	Point inoculation	Good-Luxuriant	>=50%	25-30°C	6 Days
Candida albicans	10231	50-100	Good-Luxuriant	>=50%	25-30°C	6 Days
Saccharomyces cerevisiae	9763	50-100	Good-Luxuriant	>=50%	25-30°C	6 Days
Escherichia coli	25922	≥1000	Inhibited	0%	25-30°C	6 Days
Escherichia coli	8739	≥1000	Inhibited	0%	25-30°C	6 Days
Bacillus subtilis	6633	≥1000	Inhibited	0%	25-30°C	6 Days

PACKAGING

In 100 & 500 gm packaging size.

STORAGE

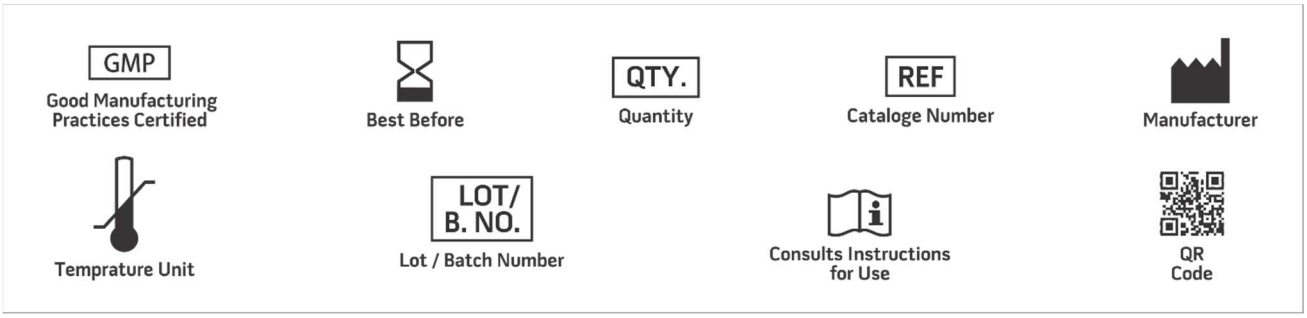
Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers below 25°C and protect from direct Sunlight. Under optimal conditions, the medium has a shelf life of 4 years. When the container is opened for the first time, note the time and date on the label space provided 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 powder show evidence of microbial contamination, discoloration, drying, or other signs of deterioration.

DISPOSAL

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

REFERENCES

1. King, Hocking and Pitt. 1979. Appl. Environ. Microbiol. 37:959
2. Beuchat and Cousin. 2001. In Downes and Ito (ed.). Compendium of methods for the microbiological examination of foods, 4th ed. American Public Health Association. Washington, D.C.
3. Beuchat, L.R., and Hwang, C.A. 1996. Int. J. Food Microbiol. 29:161-166.
4. Beckers, H.J., et al. 1982. Int. Stand. Org. Document ISO/TC34/SC9/N151



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

*For Lab Use Only
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