

DRBC AGAR

INTENDED USE:

Dichloran Rose-Bengal Chloramphenicol Agar is a selective medium for yeasts and moulds associated with food spoilage.

PRINCIPLE AND INTERPRETATION:

Peptic digest of animal tissue provides nitrogen, vitamins and minerals. Dextrose is a carbohydrate source. Phosphate buffers the medium. Magnesium sulfate provides divalent cations and sulfate. Dichloran is an antifungal agent, added to the medium to reduce colony diameters of spreading fungi. Rose Bengal exhibits an improved inhibitory activity at pH 5,6 and hence the final pH of the medium is maintained at 5,6 for the inhibition of spreading fungi. The presence of rose bengal in the medium suppresses the growth of bacteria and restricts the size and colonies of the more rapidly growing moulds. 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 moulds 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 moulds colonies, which allows these colonies to be easily recognized and enumerated. This medium should not be exposed to direct light as rose bengal undergoes photo-degradation leading to formation of toxic chemicals for fungi.

COMPOSITION:

Ingredients	Gr/Liter
Peptone	5 gr
Glucose	10 gr
Potassium dihydrogen phosphate	1 gr
Magnesium sulphate	0,5 gr
Dichloran	0,002 gr
Rose-Bengal	0,025 gr
Chloramphenicol	0,1 gr
Agar	15 gr

***Formula adjusted, standardized to suit performance parameters

pH: $5,6 \pm 0,2$

PRECAUTIONS:

For professional use only. Do not use plates if they show evidence of microbial contamination, discoloration, drying, cracking or other signs of deterioration.

TEST PROCEDURE:

1-Add 40ml of the food sample to 200ml of 0,1% peptone water and process in a Seward `Stomacher' for 30 seconds or alternatively weigh into 0,1% peptone water and leave for 30 minutes shaking periodically.

2-Inoculate 0.1ml of the prepared sample on the medium surface.

3-Incubate the plates at 25°C and examine after 3, 4 and 5 days.

4-Report as number of colonies per gram of food.

QUALITY CONTROL:

1.Sterility Control:

Incubation 48 hours at 30-35°C and 72 hours at 20-25°C: NO GROWTH

2.Phsical/Chemical Control

pH: 5,6 ± 0,2 **Apperance:** Pink

3.Microbiological Control: Incubation at 25±2 °C during 48 h-5d

Microorganism	Inoculum (CFU)	Results
Aspergillus brasiliensis ATCC 16404	10-100	Growth
Candida albicans ATCC 10231	10-100	Growth
E. coli ATCC 25922	100-1000	Inhibition



RTA.KK.125 Revision Date/Revision Number:-/0 Issue Date: 01.11.2014

STORAGE CONDITIONS AND SHELF LIFE:

Store the prepared medium at 2 - 12°C. Use before expiry date on the label. Do not use beyond stated expiry date.

DISPOSAL:

Incubated prepared medium may contain active bacteria and micro-organisms. Do not open infected medium. Infected plate should be autoclaved, incinerated or opened and soaked in a chlorine-based disinfectant (liquid bleach) for 20 minutes prior to disposal.

PACKAGING:

Katalog Number: 02025 Packaging: Single wrap Content: 10 plates/each package

REFERENCES:

King D.A. Jr., Hocking A.D. and Pitt J.I., 1979, J. Appl. Environ. Microbiol., 37:959.
Sharp A.N. and Jackson A.K., 1972, J. Appl. Bact., 24:175.
U.S. Food and Drug Administration, 1995, Bacteriological Analytical Manual, 8th Ed., AOAC International, Gaithersburg, Md.

