

DICHLORAN ROSE BENGAL AGAR (DRBC) ACCORDING TO ISO 21527-1:2009

INSTRUCTION FOR USE READY-TO-USE PLATED MEDIA

For professional use

Intended use: DRBC Agar is used for the selective isolation and enumeration of yeasts and molds from foods.

Ref.:	Type of medium:	Packaging:
201508	ready-to-use medium-plate	1x10 pcs (90 mm)

1. Principle: enzymatic digest of animal and plant tissue provides nitrogen, carbon, and vitamins required for organism growth. Glucose is included as an energy source. Potassium dihydrogen phosphate is a buffering agent. Magnesium sulphate is a source of divalent cations and sulfate. The antifungal agent, dichloran, is added to reduce colony diameters of spreading fungi. The pH of the medium is reduced from 7.2 to 5.6 for improved inhibition of spreading fungi. Rose Bengal suppresses growth of bacteria and restricts the size and height of colonies of more rapidly growing molds. The concentration of Rose bengal is reduced from 50 µg/mL to 25 µg/mL, found in Rose Bengal Chloramphenicol Agar, for optimal performance with dichloran. Chloramphenicol is included to inhibit the growth of bacteria present in environmental and food samples. Inhibition of bacterial growth and the restricted spreading of rapidly growing molds aids in isolation of slow - growing fungi. In addition, Rose bengal is absorbed by yeast and mold colonies, allowing these colonies to be easily recognized and enumerated. Reduced recovery of yeasts may be encountered due to increased activity of Rose Bengal at pH 5.6. Agar is the solidifying agent.

2. Formula/Liter:

Enzymatic digest of animal and plant tissue	5.0 g
Glucose	10.0 g
Potassium dihydrogen phosphate	1.0 g
Magnesium sulphate	0.5 g
Rose-bengal	0.025 g
Chloramphenicol	0.1 g
Dicholran	0.002 g
Agar	15.0 g

3. pH: 5.6 ± 0.2 at 25°C.

4. Appearance:

Prepared Appearance: prepared medium is clear and pink.

5. Sample: food samples.

6. Test procedure: if the agar plate has been refrigerated, allow to warm to room temperature before inoculation. Prepare samples and make tests according to ISO 21527-1:2009 Incubate in aerobically atmosphere for 5 days in 25±1°C.

7. Results: after incubation time observe growth of characteristic microorganisms and count colonies.

8. Quality control: perform quality control testing for both negative and positive reaction by inoculating a representative sample of plates with pure cultures of stable control organisms that produce known, desired reactions according to ISO 11133:2014.

Microorganism:	Method of control:	Spec. Values:
<i>Saccharomyces cerevisiae</i> WDCM 00058	productivity: quantitative	PR ≥0,5
<i>Aspergillus brasiliensis</i> WDCM 00053	productivity: quantitative	PR ≥0,5
<i>Escherichia coli</i> WDCM 00013	selectivity: qualitative	no growth
<i>Bacillus subtilis subsp. spizizenii</i> WDCM 00003	selectivity: qualitative	no growth

9. Precautions: due to nutritional variation, some strains may be encountered that grow poorly or fail to grow on this medium.

10. Disposal of waste: after use, all plates and any other contaminated materials must be sterilized or disposed of in line with appropriate internal procedures and in accordance with local legislations. Plates can be destroyed by autoclaving at 121°C for at least 20 minutes.

11. Storage: on receipt, store plates at 2-12°C away from direct sun light in an inverted position. Do not overload a refrigerator with excessive amounts of plates to avoid water condensation on the lids during storage. Plates must not come into direct contact with the inner walls of refrigerator, as the media may freeze, invalidating the tests. Prepared plates, stored in their original sleeve wrapping at 2-12°C until just prior to use, may be inoculated up to the expiration date and incubated for recommended incubation times. Plates from opened stacks of 10 plates should be used for two weeks when stored in a clean area at 2 to 12° C. Do not use plates if they show evidence of microbial contamination, discoloration, drying, cracking or others signs of deterioration. Allow the medium to warm to the room temperature before inoculation.

All microbiological media containing dyes or light-sensitive components should be protected from light and stored in the dark.

Note that shelf life of the growth media changes after the addition of supplements. Complete media containing protein supplement tend to degrade faster than basal media alone.

12. Shelf life: 3 months.

13. Required supplements not supplied together with medium base: not applicable.

14. References: available on request.



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