R1273 Rose Bengal Agar Base

Rose Bengal Agar Base with supplement is recommended for the selective isolation and enumeration of yeasts and moulds from the environment and food.

Composition:

Ingredients	Grams/Litre
Papic digest of soybean meal	5.0
Dextrose	10.0
Monopotassium phosphate	1.0
Magnesium sulphate	0.5
Rose bengal	0.05
Agar	15.0
Final pH 7.2 +/- 0.2 at 25°C	

Store prepared media below 8°C, protected from direct light. Store dehydrated powder in a dry place in tightly-sealed containers at 2-25°C.

Directions:
Suspend 31.55 g of Rose Bengal Agar Base in 1000 ml of distilled water. Boil to dissolve the medium completely. Sterilize by autoclaving at 15 lbs. pressure (121°C) for 15 minutes. Cool to 45°C and add 2 vials of rehydrated Chloramphenicol Selective Supplement (Fluka 29231) to 1 litre of the Rose Bengal Agar Base. Mix thoroughly and pour into sterile petri plates.

Principle and Interpretation:
Papaic digest of soyabean meal provides essential growth nutrients. Dextrose is the fermentable carbohydrate. Monopotassium phosphate act as a buffering agents and magnesium is a trace element important for the growth of yeasts and moulds. Rose bengal dye suppresses the development of bacteria and reduces the spreading of moulds. Chloramphenicol has inhibitory action on gram-negative bacteria. The number of yeasts or moulds is calculated per 1 g or 1 ml of sample being tested by multiplying the number of colonies observed by the diltution factor. Colonies of bacteria on this medium may be mistaken for those of yeasts and thus should be examined microscopically to confirm their identity.

Cultural characteristics after 5 days at 20-25°C.

Organisms (ATCC)	Growth
Aspergillus niger (16404)	+++
Candida albicans (10231)	+++
Saccharomyces cerevisiae (9763)	+++
Escherichia coli (25922)	-
Micrococcus luteus (10240)	-

References:

1. B. Jarvis, J. Appl. Bacteriol. 36, 723 (1973)
2. W.W. Overcast, et al., J. Milk Food Technol. 32, 442 (1969)
3. J.C.G. Ottow, et al., Appl. Microbiol.16. 1, 170 (1968)
4. J.A. Koburger, Bact. Proc. 13, A73 (1968)
5. J.F. MacFaddin, Media for Isolation-Cultivation-Identification-Maintenance of Medical Bacteria. Vol. 1. Williams and Wilkins. Baltimore, Maryland (1985)
6. American Type Culture Collection, Manassas, Va., U.S.A.

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.