

Reference: 064-PA0038 Scharlau Microbiology - Technical Data Sheet

**Product: Rose Bengal Chloramphenicol Agar** 

# **Specification**

Selective medium for isolation of yeast and moulds from the environment and food products.

| Present | tation |
|---------|--------|
|---------|--------|

20 Prepared Plates
90 mm
1 box with 2 packs of 10 plates/pack. Single cellophane.

Shelf Life Storage
3,5 months 2-14°C

## Composition

| Composition (g/l):  |      |
|---------------------|------|
| Mycological peptone | 5.00 |
| D(+) Glucose        | 10.0 |
| Potassium phosphate | 1.00 |
| Magnesium sulfate   | 0.50 |
| Rose bengal         | 0.05 |
| Chloramphenicol     |      |
| Agar                |      |
|                     |      |

### **Description / Technique**

#### Description

Rose Bengal Agar is a selective medium used to detect and enumerate moulds and yeasts in food samples. In addition the nutritional requirements for moulds and yeasts, this medium also contains Rose Bengal, which apart from turning the yeast a pink colour, facilitates counting, by reducing the luxuriant growth of moulds such as Rhizopus and Neurospora. This makes it is easier to detect other slower growing moulds.

The chloramphenicol included in the formulation inhibits bacterial growth, but does not interfere with the growth of fungi.

#### Technique

For plate inoculation follow the laboratories standard methods or the applicable norms (spiral plating method, econometric methods, streak plating, dilution banks, spread plating with drigralsky rod etc.)

After making a dilution bank, take 0,1 mL from each dilution and inoculate on Rose Bengal Agar plates with a Drigalsky Loop or glass spreader. Incubate at 25±1°C for 5 days enumerate the fungi.

#### Limitations:

- The low concentration of antibiotic that contains the culture medium can be expected that the growth of certain strains of bacteria is inhibited only partially.
- This medium is photo-sensible. Do not expose this medium to the light since photo-degradation of Rose Bengal produce compounds toxic to fungi.

#### **Quality control**

### Physical/Chemical control

Color : Strongly pink pH:  $7.2 \pm 0.2$  at  $25^{\circ}$ C

#### Microbiological control

Spiral Spreading: Practical range 100±20 CFU; Min. 50 CFU (Productivity) / 10<sup>4</sup>-10<sup>6</sup> CFU (Selectivity).

Aaerobiosis. Incubation at 25°C±1, reading at 48-72 h to 5 days.

MicroorganismGrowthEscherichia coli ATCC® 8739InhibitedBacillus subtilis ATCC® 6633InhibitedAspergillus brasiliensis ATCC® 16404Good ( ≥ 50 %)Candida albicans ATCC® 10231Good ( ≥ 50 %)

Sterility Control

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

Check at 7 days after incubation in same conditions

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# **Bibliography**

- · ATLAS, R.M., L.C. PARKS (1993) Handbook of Microbiological Media. CRC Press, Inc. London.
- · CLESCERI, L.S., A.E. GREENBERG & A.D. EATON (1998) Standard Methods for the examination of water and wastewater. 20<sup>th</sup> ed. APHA. Washington DC.
- · DOWNES, F.P. & K. ITO (2001) Compendium of Methods for the Microbiological Examination of Foods. 4th ed. APHA. Washington DC.
- . ISO 11133:2014. Microbiology of food, animal feed and water. Preparation, production, storage and performance testing of culture media.
- · MARSHALL, R.T. (1993) Standard methods for the examination of dairy products. 16<sup>th</sup> ed. APHA, Washington DC.

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