



Specification

Culture medium for the isolation and identification of *Candida sp.*

Presentation

	Packaging Details	Shelf Life	Storage
20 Prepared Plates 90 mm with: 21 ± 2 ml	1 box with 2 packs of 10 plates/pack. Single cellophane..	3 months	2-14°C

Composition

Composition (g/l):		Note: A decrease in pH is normal and does not affect performance.
Yeast extract.....	1.00	
Dextrose.....	10.00	
Glycine.....	10.00	
Sodium sulfite.....	3.00	
Ammonium Bismuth Citrate.....	5.00	
Agar.....	15.00	

Description /Technique

Nickerson Agar (BIGGY) is suitable for the isolation and identification of *Candida* species. The medium is made according to the general principles of Bismuth-Sulfite Agar. An inhibitory and differential medium using a high concentration of glycine for selectivity. This medium is highly inhibitory, and does not allow bacterial growth, however most *Candida spp.* grow freely and rapidly. Occasionally, tiny colonies of bacteria or highly repressed moulds may appear.

The appearance of the colonies in this medium after an incubation of 48-72 hours at 28-30 °C is as follows:

- *Candida albicans*: Creamy colonies, very convex, circular with very slight mycelial border and black or dark brown in colour. It has no metallic sheen or diffused pigment, even after 72 hours of incubation.
- *Candida tropicalis*: Acuminated colonies, creamy, irregular and with slight mycelial borders. Dark brown with black centre. After 72 hours of incubation the colonies may take on a metallic sheen and produce a diffused zone of pigment.
- *Candida krusei*: Big and plain colonies, with irregular borders. Brown colour, darker in the centre. A yellow halo appears around the colony.
- *Candida parakrusei*: Plain colonies, average size, irregular. Dark red centre and light red borders, but when the border is mycelial it looks yellow.
- *Candida pseudotropicalis*: Big and plain colonies, dark red colour with mycelial border.
- *Candida stellatoidea*: Average size plain colonies, dark brown colour, without mycelial development.
- *Rhodotorula*: Creamy convex colonies, with irregular border and colours ranging from pink to orange.
- Moulds in general: Restricted colonial growth and cottony appearance.

Note: A decrease in pH is normal and does not affect performance. The medium is Off-white / opalescent. Precipitates may appear, this precipitates do not affect the performance of the media.

Quality control

Physical/Chemical control

Color : Off-white / opalescent pH: 6.8 ± 0.2 at 25°C

Microbiological control

Spiral Spreading: Practical range 100±20 CFU; Min. 50 CFU (Productivity) / 10⁴-10⁶ CFU (Selectivity).

Aerobiosis. Incubation at 28 ± 2°C during 24 - 72 h.

Microorganism

- Candida albicans* ATCC® 10231, WDCM 00054
- Candida tropicalis* ATCC® 1369
- Escherichia coli* ATCC® 25922, WDCM 00013

Growth

- Good. Dark brown colonies.
- Good. Dark brown colonies.
- Inhibition (Partial to complet)

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





Reference: PA0018

Technical Data Sheet

Product: **Nickerson Agar (BiGGY)****Bibliography**

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- NICKERSON (1953) Reduction of Inorganic substance by yeast I. Extracellular reduction of sulfite by species of *Candida* J. Inf. Dis 93:43.