

HYGİSLİDE PCA / DRBC

PRINCIPLE AND INTERPRETATION:

Side1: PCA: A non-selective medium for the plate count of microorganisms in milk, other dairy products, foods, water and waste water. Plate Count Agar is equivalent to the medium recommended by APHA for the isolation of microorganisms in milk and other dairy products. Tryptone provides amino acids and other complex nitrogenous substances and yeast extract supplies Vitamin B complexes.

Side 2:DRBC: Dichloran Rose-Bengal Chloramphenicol Agar is a selective medium for yeasts and moulds associated with food spoilage. 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:

PCA

Ingredients	Gr/Liter
Tryptone	5 gr
Yeast extract	2,5 gr
Glucose	1 gr
Agar	9 gr

pH: 7,1 ± 0,2

DRBC

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

pH: 5,6 ± 0,2

***Formula adjusted, standardized to suit performance parameters

INSTRUCTIONS FOR USE:

Testing Fluids:

1. Mix liquid test sample.
2. Remove the paddle from the vial. Do not touch the agar surfaces.
3. Immerse the slide in the fluid to be tested for about 5- 10 seconds. Alternatively expose the slide to a spray or running fluid so that the slide surfaces are covered.
4. Both agar surfaces must be completely contacted.
5. Allow excess fluid to drain off both paddle agar surfaces.
6. Replace the Slide into the tube and twist to tighten the cap. Label the tube with the identification label supplied. Incubate the slide as directed later.

Testing Surfaces:

1. Remove the paddle from the vial. Do not touch the agar surfaces.
2. To assure an accurate area recovery, contact the paddle to 20²cm of the surface by contacting the surface twice in separate 10²cm areas.
3. Replace the Slide into the tube and twist to tighten the cap. Label the tube with the identification label supplied. Incubate the slide as directed later.

QUALITY CONTROL:

1.Sterility Control:

Incubation 2 d at 30-35°C and 3 d at 20-25°C: NO GROWTH

2.Physical/Chemical Control

	pH	Apperance:
PCA :	7,1 ± 0,2	Light amber
DRBC :	5,6 ± 0,2	Pink

3.Microbiological Control: Incubate at 35±2 °C for 24 hours and 25±2 °C for 48 hours-5 days

Side1: PCA

Microorganism	Inoculum (CFU)	Results	
		Growth	Reaction
Escherichia coli ATCC 25922	10-100	Good	Cream colonies
Staphylococcus aureus ATCC 6538	10-100	Good	Cream colonies
B.subtilis ATCC 6633	10-100	Good	Cream colonies

Side2: DRBC

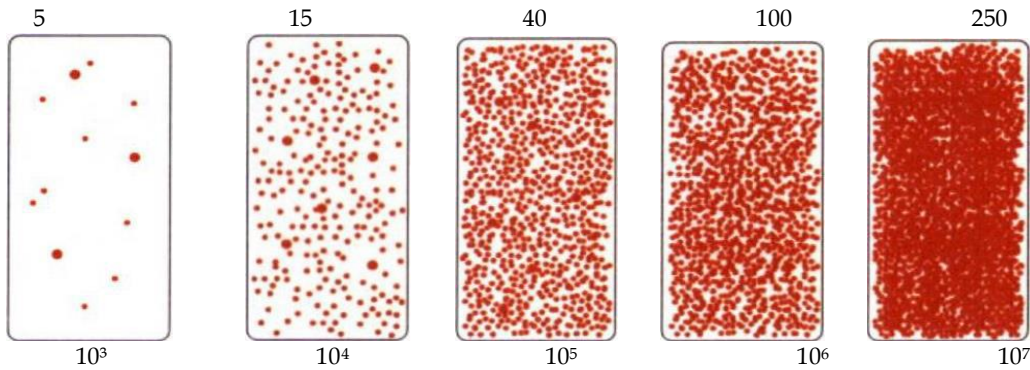
Microorganism	Inoculum (CFU)	Results
Aspergillus brasiliensis ATCC 16404	10-100	Growth
Candida albicans ATCC 10231	10-100	Growth
E. coli ATCC 25922	100-1000	Inhibition

INTERPRETATION OF RESULTS

Compare the slide surfaces against the comparison chart printed below. Read the result corresponding to fluids or surfaces as appropriate. Note that very high levels of organisms could lead to a confluent growth and could be recorded as a nil result. Compare against an unused slide when reading results.

Bacteria Comparison Chart

Surfaces
CFU/cm²



Fluids
CFU/mL

Fungi Comparison Chart



+
Slight



++
Moderate



+++
Heavy

DISPOSAL:

Incubated Slides may contain active bacteria and micro-organisms. Do not open infected slides except as part of disposal procedure. Infected slides should be autoclaved, incinerated or opened and soaked in a chlorine-based disinfectant (liquid bleach) for 20 minutes prior to disposal.

STORAGE CONDITIONS AND SHELF LIFE:

Slides should be stored in 2-20 °C. Temperature fluctuations may result in condensation settling at the bottom of the vial, although this does not affect culture properties, it could reduce the shelf-life or cause the agar to separate from the plastic paddle support.

Avoid sudden temperature changes. Shield from direct sunlight. Do not allow paddles to freeze. Do not use any slides which have been inadvertently contaminated during storage and which are already showing growth of micro-organisms

Use before expiry date on the label. Do not use beyond stated expiry date.

PACKAGING:

Katalog Number: 06035

Content/Packaging: 20 Slides/Box

REFERENCES:

1. American Public Health Association, Standard Methods for the Examination of Dairy Products, 14th ed., APHA Inc., Washington, D.C. (1978)
2. E.W. Frampton, et al., Comparison of β -glucuronidase and indole-based direct plating methods for enumeration of unstressed E. coli, J. Food Protect. 53, 933 (1990)
3. King D.A. Jr., Hocking A.D. and Pitt J.I., 1979, J. Appl. Environ. Microbiol., 37:959.
4. Sharp A.N. and Jackson A.K., 1972, J. Appl. Bact., 24:175.
5. U.S. Food and Drug Administration, 1995, Bacteriological Analytical Manual, 8th Ed., AOAC International, Gaithersburg, Md.



Aseptic Sterile



Batch Code



Catalogue Number



Negative Controls



Positive Controls



Use by



Temperature
Limitation



Do not reuse



Contains sufficient
for <n> tests



Look at user manual



Manufacturer