



PCA + TTC + Neutralizing / DRBC + Neutralizing

Flex Dip-slide with a selective medium for detection of fungi and a non selective medium for total bacterial count.

DESCRIPTION

Contact Slide Plate Count Agar + TTC + Neutralizing / Dichloran-Rose Bengal Chloramphenicol Agar + Neutralizing is a ready-to-use device with two different media coated onto a plastic support used for the microbial monitoring of surfaces and liquids even in the presence of residues of disinfectants.

The selective medium allows the isolation and enumeration of yeasts and moulds. The other medium is used to obtain the total bacterial count.

TYPICAL FORMULA

PCA + TTC + Neutralizing Side 1	(g/l)	DRBC Agar + Neutralizing Side 2	(g/l)
Enzymatic Digest of Casein	5.0	Enzymatic Digest of Animal and Plant Tissues	5.0
Yeast Extract	2.5	Glucose	10.0
Glucose	1.0	Potassium Dihydrogenphosphate	1.0
Triphenyl Tetrazolium Chloride	0.1	Magnesium Sulfate	0.5
Neutralizing	*	Dichloran	0.002
Agar	15.0	Rose Bengal	0.025
Final pH 7.0 ± 0.2		Chloramphenicol	0.1
		Agar	15.0
		Neutralizing	*
		Final pH 5.6 ± 0.2	

*Histidine, 1.0 Lecithin, 0.7 Tween 80, 5.0 Sodium Thiosulfate, 0.5

METHOD PRINCIPLE

PCA + TTC + Neutralizing contains triphenyltetrazolium chloride as growth indicator forming a red insoluble compound which may easily be observed.

DRBC Agar + Neutralizing includes Dichloran (2,6-dichloro-4-nitroaniline), Rose Bengal and Chloramphenicol as selective agents. Dichloran is an antifungal agent which is added to reduce colony diameters of spreading fungi. Rose Bengal and Chloramphenicol suppress bacterial growth and restrict spreading of rapidly growing moulds allowing the isolation of slow-growing fungi.

TEST PROCEDURE

1. Unscrew and extract the slide from its cylindrical container. Avoid any contact with the agar surface.
2. For surfaces monitoring, flex the cap forming a 90° angle and press each side of the slide firmly against the surface to be examined for 10 seconds. Alternatively, use a swab for sampling the area, afterwards roll the swab gently over the agar surface.
For examination of liquids, hold the slide by the cap and immerse it completely into the test fluid.
3. Reinsert the slide into its tube, screw it tight and incubate aerobically at 25-30°C for 3-5 days. Examine on the third day to record the count on PCA + TTC + Neutralizing. If fungal colonies on DRBC Agar + Neutralizing are numerous, count them and then count again on day 5, if possible. **Note:** different incubation temperatures and times may be required depending on the environment and organisms under investigation.

RESULTS INTERPRETATION

Count the total number of colonies on PCA + TTC + Neutralizing (**Side 1**) to obtain the total bacterial count. On DRBC Agar + Neutralizing (**Side 2**), yeasts absorb Rose Bengal forming pink colonies.

APPEARANCE

Side 1. Slightly opalescent, light amber.

Side 2. Very slightly to slightly opalescent, bright pink.

STORAGE CONDITIONS

10-25°C away from light, until the expiry date on the label. Eliminate if signs of deterioration or contamination are evident.

SHELF LIFE

9 months

QUALITY CONTROL

Slides are inoculated with the microbial strains indicated in the QC table.

Inoculum for productivity: 50-100 CFU.

Inoculum for selectivity: 10⁴-10⁶ CFU.

Incubation conditions: 37 ± 1°C for 24-48 h .

QC Table.

Microorganism		Growth on Side 1	Growth on Side 2
<i>Escherichia coli</i>	ATCC® 25922	Good, red colonies	Inhibited
<i>Staphylococcus aureus</i>	ATCC® 25923	Good, red colonies	Inhibited
<i>Candida albicans</i>	ATCC® 10231	Good, pink-red colonies	Good, pink-white
<i>Saccharomyces cerevisiae</i>	ATCC® 9763	Good, pink-red colonies	Good, pink-white
<i>Aspergillus brasiliensis</i>	ATCC® 16404	Good, pink colonies	Good, white/black

WARNING AND PRECAUTIONS

The product does not contain hazardous substances in concentrations exceeding the limits set by current legislation and therefore is not classified as dangerous. It is nevertheless recommended to consult the safety data sheet for its correct use. The product must be used by properly trained operators only.

DISPOSAL OF WASTE

Disposal of waste must be carried out according to national and local regulation in force.

BIBLIOGRAPHY

- ISO 4833-1:2013. Microbiology of the food chain -- Horizontal method for the enumeration of microorganisms -- Part 1: Colony count at 30 degrees C by the pour plate technique.
- ISO 4833-2:2013. Microbiology of the food chain -- Horizontal method for the enumeration of microorganisms -- Part 2: Colony count at 30 degrees C by the surface plating technique.
- ISO 21527-1:2008. Microbiology of the food and animal feeding stuffs -- Horizontal method for the enumeration of yeasts and moulds -- Part 1: Colony-count technique in products with water activity greater than 0,95.
- ISO 18593:2004. Microbiology of food and animal feeding stuffs- Horizontal method for sampling techniques from surfaces using contact plates and swabs.
- Marshall R.T. ed. (1993). Standard methods for the examination of dairy products, 16th ed. American Public Health Association, Washington, D.C.

PRESENTATION

	Packaging	Ref.
Contact Slide PCA+TTC+Neutr./DRBC+Neutr.	20 slides	525432
Contact Slide PCA+TTC+Neutr./DRBC+Neutr.	120 slides	53543

TABLE OF SYMBOLS

LOT Batch code	 Keep away from sunlight	 Manufacturer	 Use by	 Fragile, handle with care
REF Catalogue number	 Temperature limitation	 Contains sufficient for <n> tests	 Caution, consult Instruction For Use	 Do not reuse

**LIOFILCHEM® s.r.l.**

Via Scozia zona ind.le, 64026 Roseto degli Abruzzi (Te) Italy
Tel. +39 0858930745 Fax +39 0858930330 www.liofilchem.com