



Contact Slide TSA + Neutralizing / Rose Bengal Agar

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

DESCRIPTION

Contact Slide TSA + Neutralizing / Rose Bengal Agar 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 for enumeration of bacteria.

TYPICAL FORMULA

TSA + Neutralizing Side 1	(g/l)	Rose Bengal Agar Side 2	(g/l)
Pancreatic Digest of Casein	15.0	Enzymatic Digest of Soybean Meal	5.0
Papaic Digest of Soya Bean	5.0	Glucose	10.0
Sodium Chloride	5.0	Monopotassium Phosphate	1.0
Triphenyl Tetrazolium Chloride	0.1	Magnesium Sulphate	0.5
Agar	15.0	Dichloran (2,6-dichloro-4-nitroaniline)	0.002
Neutralizing	*	Rose Bengal	0.025
Final pH 7.3 ± 0.2		Gentamicin	0.03
*Histidine, 1.0 Lecithin, 0.7 Tween 80, 5.0 Sodium Thiosulfate, 0.5		Trimethoprim	0.025
		Agar	15.0
		Final pH 7.2 ± 0.2	

METHOD PRINCIPLE

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

Rose Bengal Agar includes dichloran, rose bengal, gentamicin and trimethoprim as selective agents to inhibit bacterial growth while restricting the colony sizes of rapidly growing moulds. Rose Bengal is also a stain and it is incorporated in the cells of yeasts and moulds, turning these colonies pink.

TEST PROCEDURE

1. Take a slide from the refrigerator and leave it at ambient temperature for about 5 minutes
2. Unscrew and extract the slide from its cylindrical container. Avoid any contact with the agar surface.
3. 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.
4. Reinsert the slide into its tube, screw it tight and incubate at 25 ± 1°C for up to 5 days.

RESULTS INTERPRETATION

Count the total number of colonies on TSA + Neutralizing (**Side 1**) to obtain the total bacterial count.

Total number of colonies grown on Rose Bengal Agar (**Side 2**) gives an assessment of the fungal contamination.

APPEARANCE

Side 1. Slightly opalescent, light amber.

Side 2. 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: 25 ± 1°C for up to 5 days.

QC Table.

Microorganism		Growth on Side 1	Growth on Side 2
<i>Escherichia coli</i>	ATCC® 8739	Good, red colonies	Inhibited
<i>Staphylococcus aureus</i>	ATCC® 6538	Good, red colonies	Inhibited
<i>Pseudomonas aeruginosa</i>	ATCC® 9027	Good, red colonies	Partially to completely inhibited
<i>Bacillus subtilis</i>	ATCC® 6633	Good, red colonies	Inhibited
<i>Candida albicans</i>	ATCC® 10231	Good	Good, pink colonies
<i>Aspergillus niger</i>	ATCC® 16404	Good	Good
<i>Saccharomyces cerevisiae</i>	ATCC® 9763	Good	Good, pink colonies

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 WAIST

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









BIBLIOGRAPHY

- ISO 18593:2004. Microbiology of food and animal feeding stuffs- Horizontal method for sampling techniques from surfaces using contact plates and swabs.
- European Pharmacopoeia 7.0 (2010) 2.6.12. Microbiological examination of non-sterile products: microbial enumeration tests.
- European Pharmacopoeia 7.0 (2010) 2.6.13. Microbiological examination of non-sterile products: test for specified microorganisms.
- Marshall R.T. ed. (1993). Standard methods for the examination of dairy products, 16th ed. American Public Health Association, Washington, D.C.
- Jarvis B. (1973). Comparison of an improved rose bengal-chlortetracycline agar with other media for the selective isolation and enumeration of molds and yeasts in foods. J. App. Bacteriol. 36:723-727.
- Koburger J.A. (1972). Fungi in foods. Effect of plating medium pH on counts. J. Milk Food Technol. 35:659-660.

PRESENTATION

	Packaging	Ref.
Contact Slide TSA + Neutralizing / Rose Bengal Agar	20 slides	525482
Contact Slide TSA + Neutralizing / Rose Bengal Agar	120 slides	53548

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.net liofilchem@liofilchem.net