

Specification

Universal culture media for a wide spectrum of applications with neutralisers.

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.	3,5 months	2-14 °C

Composition

Composition (g/l):	
Casein Peptone.....	15.0
Soy Peptone	5.0
Sodium chloride.....	5.0
L-cystine.....	0.3
D(+) Glucose.....	5.5
Histidin.....	0.5
Lecitin.....	1.0
Polysorbate 80.....	5.0
Triton X-100.....	1.0
Agar.....	17.0

Description /Technique

Collect, dilute and prepare samples and volumes as required according to specifications, directives, official standard regulations and/or expected results.

This medium is also well suited for air environmental sampling (total compatibility with most commercially available air samplers) or for other types of environmental sampling (fingers or gloves of operators, swab streaking,...).

Spread the plates by streaking methodology or by spiral method.

Incubate the plates right side up aerobically at 30-35°C for 18-24 h. for bacteria and fungi until 5 days.

(Incubation times greater than those mentioned above or different incubation temperatures may be required depending on the sample, on the specifications,... This medium can be inoculated directly or after enrichment broth).

After incubation, enumerate all the colonies that have appeared onto the surface of the agar.

Each laboratory must evaluate the results according to their specifications.

Calculate total microbial count per ml of sample by multiplying the average number of colonies per plate by the inverse dilution factor if streaked a diluted sample. Report results as Colony Forming Unit (CFU's) per ml or g along with incubation time and temperature.

Quality control

Physical/Chemical control

Color : Straw-coloured yellow pH: 7.2 ± 0.2 at 25°C

Microbiological control

Growth Promotion Test 50-100 CFU according to harmonized pharmacopoeial monographs and test methods & ISO 11133:2014/A1:2018
 Inoculate: Practical range 100 ± 20 CFU. Min. 50 CFU (Productivity).

Analytical methodology according to ISO 11133:2014/A1:2018; A2:2020.

Aerobiosis. Incubation at 30-35 °C. Read after 18-24 h to 72 h for bacteria and 3-5 days for fungi.

Microorganism

Escherichia coli ATCC® 8739, WDCM 00012
Staphylococcus aureus ATCC® 6538, WDCM 00032
Bacillus subtilis ATCC® 6633, WDCM 00003
Candida albicans ATCC® 10231, WDCM 00054
Ps. aeruginosa ATCC® 9027, WDCM 00026
Salmonella typhimurium ATCC® 14028, WDCM 00031

Growth

Good (≥70%)
 Good (≥70%)
 Good (≥70%)
 Good (≥70%)
 Good (≥70%)
 Good (≥70%)

Sterility Control

Incubation 48 h at 30-35 °C and 48 h at 20-25 °C: NO GROWTH.
 Check at 7 days after incubation in same conditions.

Bibliography

- ASTM Standard E 640-78 (1991) Test Method for the preservatives in water-containing cosmetics. Philadelphia. PA. USA.
- ATLAS, R.M., L.C. PARKS (1993) Handbook of Microbiological Media. CRC Press, Inc. London.
- FDA (Food and Drug Administrations) (1998) Bacteriological Analytical Manual. 8th ed. Revision A. AOAC International. Gaithersburg. MD. USA.
- HORWITZ, W. (2000) Official Methods of Analysis. 17th ed. AOAC International. Gaithersburg. MD. USA.
- ISO 11133:2014/ Adm 1:2018. Microbiology of food, animal feed and water. Preparation, production, storage and performance testing of culture media.
- LUCAS, I.P. (1977) Microbiological Examination of Cosmetics. Newburger's Manual of Cosmetic Analysis A. O.A.C. Washington. USA.
- US PHARMACOPOEIA (2002) <61> Microbial Limit Tests. 25th ed. US Pharmacopeial Convention. Rockville. MD. USA.
- WEBER, G.R. & L.A. BLACK (1948). Relative efficiency of quaternary inhibitors. Soap and Sanit. Chem. 24:134-139.

Storage

Storage conditions: 2-14°C

Alternatively the plates may also be stored at the range of 2 - 25°C, with a proper performance of the medium, but some precautions must be taken into account:

- In the range of 2 - 8 °C avoid direct contact with surfaces that can freeze product.
- In the range of 15 - 25 °C, dehydration control must be taking in account.