

Specification

Nutrient rich medium suitable for the isolation of pathogenic microorganisms from clinical specimens and ISO standards.

Presentation

20 Prepared plates
90 mm
with: 21 ± 2 ml

Packaging Details

1 box with 2 packs of 10 plates/pack. Single cellophane.

Shelf Life

2,5 months

Storage

2-14 °C

Composition

Composition (g/l):

Proteose peptone.....	15.00
Liver extract.....	2.50
Yeast extract.....	5.00
Sodium chloride.....	5.00
Agar.....	15.00
Defibrinated Sheep blood.....	50.00 ml

Description /Technique

Description:
Blood Agar Base No. 2 allows maximum recovery of weak organisms without altering or interfering in their haemolytic reactions. Compared to other Blood Agar bases, Blood Agar Base No. 2 has an equal or higher stimulatory growth capacity, however it is specially formulated to promote pigment production in chromogenic bacteria. The formulation according to ISO standard 7932 (2003) differs from other authors in its final pH value.

Technique:
Collect, dilute and prepare samples as required.
Spread the sample onto the plate by streaking methodology or by spiral method. Incubate the plates in inverted position in a 5% carbon dioxide enriched aerobic atmosphere at 37°C for 48 hours. Preferably, spread with the same sample other non-enriched or non-selective media, previously defined by the laboratory, to have better and comparative results.
Different animal blood source, greater incubation times, humidity or larger percentage of carbon dioxide in atmosphere,... may be required depending on the sample, on the specifications of the laboratory, the expected isolations to be found.
Each laboratory must evaluate and report results carefully; this highly nutritive medium allows recovery of a wide variety of fastidious microorganisms.
Consider both hemolysis reactions and colony appearance as well as the results obtained from other culture media, as keys for microbiological identification (Calculate total microbial counts considering, if applied to the samples, the inverted dilution factors).

Quality control

Physical/Chemical control

Color : Red pH: 7.2 ± 0.2 at 25°C

Microbiological control

Spiral Spreading: Practical range 100 ± 20 CFU. min. 50 CFU (productivity) / 10⁴-10⁶ CFU (selectivity).

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

Aerobiosis. Incubation at 37 °C ± 1, reading after 24-48 ± 2h

Microbiological control according to ISO 11133:2014/A1:2018; A2:2020.

Microorganism

Streptococcus pneumoniae ATCC® 49619
Streptococcus pyogenes ATCC® 19615
Streptococcus agalactiae ATCC® 12386
Staphylococcus aureus ATCC® 6538, WDCM 00032
Escherichia coli ATCC® 8739, WDCM 00012
Bacillus subtilis ATCC® 6633, WDCM 00003 (30°C)
L. monocytogenes ATCC® 13932, WDCM 00021
Bacillus cereus ATCC® 11778, WDCM 00001

Growth

Good Alpha haemolysis- Greenish halo
Good Beta-haemolysis- Clear halo
Good Beta-haemolysis- Clear halo
Good Beta-haemolysis- Clear halo
Good Gamma haemolysis- Without halo
Good Gamma haemolysis- Without halo
Good Beta-haemolysis- Clear halo
Good Beta-haemolysis- Clear halo

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.

Bibliography

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- DOWNES, F.P. & K. ITO (2001) Compendium of methods for the Microbiological Examination of Foods. APHA. Washington.
- FDA (Food and Drug Administrations) (1998) Bacteriological Analytical Manual. 8th ed. Rev. A. APHA International. Gaithersburg, VA.
- ISO 7932 Standard (2003) Microbiology of food and animal feeding stuffs. Horizontal Methods for the enumeration of presumptive *Bacillus cereus*. Colony count technique at 30°C.
- ISO 11133:2014/ Adm 1:2018/ Adm 2:2020/ Microbiology of food, animal feed and water. Preparation, production, storage and performance testing of culture media.
- ISO 11290-1:2017 Standard. Microbiology of the food chain. Horizontal method for the detection and enumeration of *Listeria monocytogenes* and for *Listeria* spp.- Part 1: Detection Method
- ISO 11290-2:2017 Standard. Microbiology of the food chain. Horizontal method for the detection and enumeration of *Listeria monocytogenes* and for *Listeria* spp.- Part 2: Enumeration Method