TECHNICAL DATA SHEET

Article No. 9750

Tryptic Soy Agar (TSA) 5% Sheep Blood, ready-to-use culture plates

SYNONYMS

Blood Agar Plate, 5% Sheep Blood in Tryptic Soy Agar Base, Trypticase Soy agar with 5% sheep blood

SPECIFICATION

Prepared plates, 90 mm. Nutrient rich medium suitable for the isolation of pathogenic microorganisms from clinical specimens.

Colour:	Red
pH:	7.2 ± 0.2 at 25 ºC

COMPOSITION IN G/L

Peptone from casein	15.0
Peptone from soya	5.0
Sodium chloride	5.0
Agar	15.0
Sheep blood	50 ml

PACKAGING DETAILS

9750-20PLATES

20 prepared plates	90 mm
Content:	21 ± 1 ml
Packaging unit:	1 box with 2 packs of 10 plates/pack. Single cellophane.

GUIDELINES

Description:
TSA is a widely used medium containing two peptones which support the growth of a wide variety of organisms, even that of very fastidious ones such as *Neisseria*, *Listeria*, *Brucella*, among others. It is frequently used for routine diagnostic purposes due to its reliability and its easily reproducible results.

Th. Geyer GmbH & Co. KG
Dornierstr. 4 – 6
D-71272 Renningen
Tel.: +49 7159 1637-0
Fax: +49 7159 1637-710
renningen@thgeyer.de
www.thgeyer.de

BW-Bank (Swift/BIC SOLADEST600)
IBAN DE85600501010002036302
Postbank Stuttgart (Swift/BIC PBNKDEFFXXX)
IBAN DE32600100700000020708
Deutsche Bank (Swift/BIC DEUTDESSXXX)
IBAN DE06600700700125518100

St.-Nr. 70093/40018 / USt-IdNr. DE147510304
Amtsgericht Stuttgart / HRA-Nr. 254140
Persönlich haftende Gesellschafterin:
Geyer Beteiligungsgesellschaft mbH
Amtsgericht Stuttgart / HRB-Nr. 252035
Geschäftsführer: Lutz-Alexander Geyer /
Oliver-Alexander Geyer / André Meise / Ralf Streicher

The medium provides, with added blood, perfectly defined hemolysis zones, while preventing the lysis of erythrocytes due to its sodium chloride content.

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 anaerobic atmosphere at 35-37ºC for 24-48 hours. Preferably, spread with the same sample other selective media, previously defined by the laboratory, to have better and comparative results.
Different animal blood sources, 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, and/or 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 count considering, if applied to the samples, the inverted dilution factors,

MICROBIOLOGICAL CONTROL

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 ºC. Read after 18-24 h to 72 h for bacteria and 3-5 days for fungi.

Microorganism	Growth
Staphylococcus aureus ATCC® 6538, WDCM 00032	Good Beta-haemolysis - clear halo
Escherichia coli ATCC® 8739, WDCM 00012	Good Gamma-haemolysis - without halo
Enterococcus faecalis ATCC® 19433, WDCM 00009	Good Gamma-haemolysis - without halo
Streptococcus pneumoniae ATCC® 49619	Good Alpha-haemolysis - greenish halo
Streptococcus pyogenes ATCC® 19615	Good Beta-haemolysis - clear halo
Streptococcus agalactiae ATCC® 12386	Good Beta-haemolysis - clear halo

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

BIBLIOGRAPHY

- ATLAS, R.M. & L.C. PARKS (1993) Handbook of Microbiological Media. CRC Press, Inc. London.
- COLIPA (1997) Guidelines on Microbial Quality Management (MQM). Brussels.
- DOWNES, F.P. & K. ITO (2001) Compendium of Methods for the Microbiological Examination of Food, 4th ed, ASM, Washington D.C.

· EUROPEAN PHARMACOPOEIA 10.0 (2020) 10th ed. § 2.6.13. Microbiological examination of non-sterile products: Test for specified microorganisms. Harmonised Method. EDQM. Council of Europe. Strasbourg.
- FDA (Food and Drug Adminstrations) (1998) Bacteriological Analytical Manual. 8th ed. Revision A. AOAC International. Gaithersburg. MD.
· HORWITZ, W. (2000) Official Methods of Analysis of AOAC INTERNATIONAL, 17th ed. Gaithersburg, MD. USA.
· ISO 9308-1 Standard (2000) Water Quality. Detection and enumeration of E. coli and coliform bacteria. Membrane filtration method.
· ISO 11731 Standard (2017) Water Quality. - Enumeration of Legionella.
· ISO 11133:2014/ Adm 1:2018. Microbiology of food, animal feed and water. Preparation, production, storage and performance testing of culture media.
· ISO 18415 Standard (2017) Cosmetics - Microbiology - Detection of specified and non-specified microorganisms.
· ISO 21149 Standard (2017) Cosmetics - Microbiology - Enumeration and detection of aerobic mesophilic bacteria.
· ISO 21150 Standard (2015) Cosmetics - Microbiology - Detection of Escherichia coli.
· ISO 22717 Standard (2015) Cosmetics - Microbiology - Detection of Pseudomonas aeuruginosa.
· ISO 22718 Standard (2015) . Cosmetics - Microbiology - Detection of Staphylococcus aureus.
· ISO 22964 (2017) Microbiology of the food chain.- Horizontal method for the detection of Cronobacter spp
· PASCUAL ANDERSON, MªRª (1992) Microbiología Alimentaria. Díaz de Santos S.A., Madrid.
· USP 33 - NF 28 (2011) <62> Microbiological examination of non-sterile products: Test for specified microorganisms. Harmonised Method. USP Corp. Inc. Rockville. MD. USA.

STORAGE

2-14 °C

SHELF LIFE

2.5 months unopened from date of manufacture

updated: 12.09.2022