Reference: 101114IF **Technical Data Sheet**

Product: **TSA Sheep Blood**

Specification

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

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.	2,5 months	2-14 ºC

Composition

Composition (g/l):

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

Description /Technique

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, etc. It is frequently used for routine diagnostic purposes due to its reliability and its easily reproducible results.

The medium provides, with added blood, perfectly defined haemolysis 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 souce, 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 be evaluate and report results carefully; this highly nutrtive 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).

Precautions

For in vitro diagnostic use. Do not reuse. For professional use only.

Do not use the product if it shows evidence of microbial contamination, discoloration, drying, cracking or other signs of deterioration.

Quality control

Physical/Chemical control

Color : Red pH: 7.2 ± 0.2 at 25ºC

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-haemolysus- 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-haemolysus- Clear halo
Streptococcus agalactiae ATCC® 12386	Good Beta-haemolysus- 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

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· USP 33 - NF 28 (2011)<62>Microbiological examination of non-sterile products: Test for specified microorganisms. Harmonised Method. USP Corp. Inc. Rockville. MD. USA.
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Storage

Storage conditions: 2-14ºC
Avoid direct contact with surfaces that can freeze product.