

## Specification

Sterile egg emulsion with potassium tellurite for Baird Parker medium preparation according to the ISO standard 6888-1.

## Presentation

1 Prepared bottle  
Bottles 125 ml  
with:  $100 \pm 3$  ml

### Packaging Details

1 box with 1 bottle (amber) 125 ml. Injectable cap:  
Plastic screw inner cap. The use of syringes needles  
with a diameter greater than 0.8 mm is not  
recommended.

### Shelf Life

18 months

### Storage

8-14°C

## Composition

Composition (g/l):

Egg Yolk .....200 ml  
Potassium tellurite.....2.10  
Sodium chloride..... 4.25  
Sterile water..... 800 ml

## Description /Technique

Sterile egg emulsion + potassium tellurite for different culture media supplementation. Add aseptically 5 ml to melted bottles of Baird-Parker base medium (100ml) cooled to 50°C, before pouring into Petri dishes when cooled to room temperature. Once solidified on a flat surface, Spread the plates by streaking methodology or by spiral method. Incubate the plates right side up aerobically at 35-37°C for 24-48 hours.

(Incubation times longer than those mentioned above or different incubation temperatures may be required depending on the sample, on the specifications,...)

After incubation, enumerate all the black-brownish colonies that have appeared onto the surface of the agar with a double halo, an inner white halo (lipase action) and an outer halo of clear medium (lecithinase activity).

Each laboratory must evaluate the results according to their specifications.

Presumptive isolaton of *S. aureus* must be confirmed by further microbiological and biochemical tests.

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 : yellow                      pH: at 25°C

### Microbiological control

Add 5 ml of product to 100 ml of Baird Parker Agar base

Inoculate: Practical range  $100 \pm 20$  CFU; Min. 50 CFU (Productivity)/  $10^4$ - $10^6$  (Selectivity).

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

### Microorganism

*Staphylococcus aureus* ATCC® 6538, WDCM 00032

*Stph. aureus* ATCC® 25923, WDCM 00034

*Escherichia coli* ATCC® 8739, WDCM 00012

*Stph. epidermidis* ATCC® 12228, WDCM 00036

*Stph. saprophyticus* ATCC® 15305, WDCM 00159

### Growth

Good. Black/grey colonies with halo. Lecithinase (+)

Good. Black/grey colonies with halo. Lecithinase (+)

Inhibited

Black/grey colonies w/o halo. Lecitinase (-)

Black/grey colonies w/o halo. Lecitinase (-)

### Sterility Control

Inoculate 10 ml of product in 100 ml THIO USP / TSB. Incubate and verify in TSA

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**

- BAIRD-PARKER, A.C. (1962) An improved diagnostic and selective medium for isolating coagulase-positive staphylococci. J. Appl. Bact. 25:12.
- EUROPEAN PHARMACOPOEIA (2007) 5<sup>th</sup>ed. Suppl. 5.6 § 2.6.13 Microbiological examination of non-sterile products. EDQM. Council of Europe. Strasbourg.
- FIL-IDF 60:2001 Standard. Lait et produits à base de lait - Detection des staphylocoques à coagulase positive - Technique du nombre le plus probable. Brussels.
- ISO 11133:2014/ Adm 1:2018. Microbiology of food, animal feed and water. Preparation, production, storage and performance testing of culture media.
- USP 31 - NF 26 (2008) <61> Microbial Limit Tests. US Pharmacopoeial Conv. Inc. Rockville. MD. USA.
- ZANGERL, P. & H. ASPERGER (2003) Media used in the detection and enumeration of *Staphylococcus aureus*. In Handbook.