Reference: 06-023-100 **Scharlau Microbiology - Technical Data**

Product: # TTC 1% Sterile Solution

Specification

Solution for the detection of microbial growth on the basis of TTC reduction

Presentation

1 Prepared Bottle
Bottle 125 ml
with: 100 ± 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	Storage
24 months	4-12 ºC

Composition

Composition (g/l):
2,3,5 Triphenyl tetrazolium chloride.....10.0
Steril distilled water..... 1000 ml

Reagent to be added, as aerobic indicator, into culture media : 01-200;01-053;01-579, 01 -294, 01-161.

Description /Technique

1% 2-3-5-triphenyl-2H-tetrazolium chloride sterile solution. It is used as an additive for culture media to show biological activity, since the colourless form gets hydrogenizated or reduced to a red insoluble pigment: triphenyl-formazan, which may be easily observed.

Despite of TTC decomposes at 240ºC, it is not advisable to incorporate it to culture media before sterilization, because it lose efficacy. Very good results may be achieved when the addition is carried out aseptically with cold medium at 60ºC maximum. TTC is photolabile and over time, depending on exposure to light and temperatures, it can acquire different shades of color, from pale yellow to intense red, therefore keep it in the refrigerator and avoid direct light.
Concentration of use vary depending on the medium, but generally it goes between 0,3 and 1% (v/v).

This product is especially produced to be added to the following media:

- Agar Chapman TTC (Tergitol 7® Agar)
- Agar Slanetz y Bartley (SB Agar)
- General purpuse media : TSA or PCA

Quality control

Physical/Chemical control

Color : Colorless - lig. yellow /

Microbiological control

Add 2,5ml to 1l of medium TSA / pour into plates

Inoculate: Practical range 100 ± 20 CFU. min. 50 CFU (productivity)/ 10^4-10^6 (selectivity).

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

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

Microorganism	Growth
Escherichia coli ATCC® 8739, WDCM 00012	Good- dark red colonies
Salmonella enterica ATCC® 13076, WDCM 00030	Good- dark red colonies
Enterococcus faecalis ATCC® 29212, WDCM 00087	Good- dark red colonies

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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