



POTASSIUM TELLURITE 3.5% SOLUTION

Liquid supplement

1 – INTENDED USE

Potassium Tellurite 3.5% Solution, sterilized by filtration, is used as a supplement in several microbiological media formulations.

2 - COMPOSITION - BOTTLE CONTENTS

Potassium tellurite 1.05 g
Distilled water 30 mL

3 - PRINCIPLE OF THE METHOD AND EXPLANATION OF THE PROCEDURE

Potassium tellurite is used as a selective and differential compound in several microbiological culture media. Potassium tellurite has an inhibitory activity against most Gram-negative bacteria and against those Gram-positive bacteria unable to reduce it.

Potassium tellurite is reduced to metallic tellurium giving the colonies or the medium a black colour.

Potassium tellurite is contained in Pergola Medium, Serum Tellurite Agar and Tinsdale Agar for the isolation of corynebacteria, in CT-SMAC agar for the detection of *E. coli* O157 and in other culture media for vibrios and streptococci.

Potassium Tellurite 3.5% Solution is used for the supplementation of staphylococci isolation media such as Giolitti-Cantoni Broth and Vogel Johnson Agar. Giolitti-Cantoni Broth requires the addition of a 3.5% solution of potassium tellurite when there is a direct addition of 1 g of the sample to 19 mL of broth. This level of potassium tellurite is necessary to suppress the high numbers of contaminating organisms that could be expected.

4 - DIRECTIONS

Giolitti-Cantoni broth: 19 mL of autoclaved and cooled single strength broth (401516) + 0.3 mL Potassium Tellurite 3.5% Solution.

Vogel Johnson Agar: 5,8 mL Potassium Tellurite 3.5% Solution + 1000 mL Vogel-Johnson Agar (402192) autoclaved and cooled to 44-47 °C.²

For details on the preparation methods, refer to the Instructions for Use of the above-mentioned culture media.

When potassium tellurite is included in the composition of other media, refer to the specific instructions for the medium concerned regarding the amount of Potassium Tellurite 3.5% that should be added to it.

5 – PHYSICAL CHARACTERISTICS

Appearance colourless clear solution

6 - MATERIALS PROVIDED - PACKAGING

Product	Type	REF	Pack
Potassium Tellurite 3.5% Solution	Liquid supplement	42211502	30 mL

7 - MATERIALS REQUIRED BUT NOT PROVIDED

Basal culture media, autoclave, water-bath, sterile loops and pipettes, incubator and laboratory equipment as required, Erlenmeyer flasks, sterile Petri dishes or tubes.

8 - TEST PROCEDURE

For inoculation, incubation and reading procedures, please refer to the Instructions for Use of culture media mentioned above.

9 - USER QUALITY CONTROL

All manufactured lots of the product are released for sale after the Quality Control has been performed to check the compliance with the specifications. However, the end user can perform its own Quality Control testing in accordance with the prepared culture medium, the local applicable regulations, in compliance with accreditation requirements and the experience of the Laboratory. Refer to the Instructions for Use of culture media mentioned above for the suggested quality control strains.

10 - LIMITATIONS OF THE METHOD

For limitations of the method, please refer to the Instructions for Use of culture media mentioned above.

11 - PRECAUTIONS AND WARNINGS

- Potassium Tellurite 3.5% Solution is for microbiological control and for professional use only; it must be used by adequately trained and qualified laboratory personnel, observing approved biohazard precautions and aseptic techniques.
- The supplement and the basal media shall be used in association according to the directions described above. Apply Good Manufacturing Practice in the preparation process of plated media.
- Potassium Tellurite 3.5% Solution is sterilised by membrane filtration.
- All laboratory specimens should be considered infectious.
- The laboratory area must be controlled to avoid contaminants such as medium powder and supplements or microbial agents.
- Sterilize all biohazard waste before disposal. Dispose the unused supplements and the sterilized media inoculated with samples or microbial strains in accordance with current local legislation.
- Do not use Potassium Tellurite 3.5% Solution as active ingredients for pharmaceutical preparations or as production materials intended for human and animal consumption.
- The Certificates of Analysis and the Safety Data Sheets of the products are available on the website www.biolifeitaliana.it.
- The information provided in this document has been defined to the best of our knowledge and ability and represents a guideline for the proper use of the product but without obligation or liability. In all cases existing local laws, regulations and standard procedures must be observed for the examination of samples collected from human and animal organic districts, for environmental samples and for products intended for human or animal consumption. Our information does not relieve our customers from their responsibility for checking the suitability of our product for the intended purpose.















12 - STORAGE CONDITIONS AND SHELF LIFE

Upon receipt, store the product in the original package at 2-8°C away from direct light. If properly stored, the product may be used up to the expiry date printed on the label; do not use beyond this date. Before use, examine the product and discard if there are obvious signs of deterioration (e.g., contamination, atypical colour or other abnormal characteristics). During the storage period, the product may crystallise and subsequently precipitate without affecting its performance; if this happens, intense agitation will help to redissolve the sediment.

13 - REFERENCES

1. Giolitti G, Cantoni C. A medium for the isolation of staphylococci from foodstuffs. J Appl Bacteriol 1966 Aug; 29(2):395-8
2. Vogel TA, Johnson M. A modification of the Tellurite-Glycine Medium for use in the identification of Staphylococcus aureus. Public Health Lab. 1960; 18:131.

TABLE OF APPLICABLE SYMBOLS

 REF or REF Catalogue number	 LOT Batch code	 Manufacturer	 This side up	 Fragile
 Temperature limitation	 Content sufficient for <n> tests	 Consult Instructions for Use	 Use by	 Keep away from direct light

REVISION HISTORY

Version	Description of changes	Date
Revision 1	Updated layout and content	2024/10

Note: minor typographical, grammatical, and formatting changes are not included in the revision history.

