

Egg Yolk Tellurite Emulsion

Intended Use

A sterile, stabilized tellurite emulsion of egg yolk recommended for identification of *Staphylococcus* species.

Summary

Egg yolk tellurite emulsion contains egg yolk emulsion and potassium tellurite. Egg yolk is particularly rich in lecithin, a substrate for the enzyme lecithinase. Production of lecithinase is a differentiating characteristic shared by a number of bacteria species including *Clostridium*, *Bacillus* and *Staphylococcus*. Potassium tellurite acts as selective agent for *Staphylococcus* species.

Principle

Some bacteria produce lecithinases enzymes that split lipoprotein complexes in egg yolk and produce opalescence in media containing egg yolk. Wide zones of opalescence around colonies show lecithinase activity. Potassium Tellurite inhibits a big variety of microorganisms while *Staphylococcus aureus* is able to reduce the potassium tellurite into metallic tellurium resulting in black colonies. Inhibition of non-staphylococcal organisms, including many Gram-negative and Gram-positive bacteria is achieved by potassium tellurite.

Reagents / Contents

Microexpress® Egg Yolk Tellurite Emulsion is pre-diluted selective supplement for Baird Parker Agar Base.

Composition per 100 mL vial:

Egg yolk	30.0 mL
Sterile Saline	64.0 mL
Sterile 3.5% Potassium Tellurite Solution	6.0 mL

Storage and Stability

1. Store the Microexpress® Egg Yolk Tellurite Emulsion Supplement kit at 2°C-8°C, away from light.
2. Stability of the Microexpress® Egg Yolk Tellurite Emulsion Supplement kit is as per the expiry date mentioned on the label.

Directions

1. Warm the refrigerated contents of 1 vial to 40°C-45°C and shake well to attain a uniform emulsion.
2. Aseptically add 50 mL emulsion in 950 mL sterile, molten Baird Parker Agar Base (63 g/950 mL).
3. Mix well and dispense as desired.

Interpretation of results

Baird Parker Agar Base containing Egg Yolk Tellurite Selective Supplement exhibits following results:

1. Typical colonies of *S. aureus* are black, shiny, convex and surrounded by clear zones (E -Y reaction) of approximately 2-5 mm. Coagulase negative Staphylococci generally do not grow well; if growth occurs, the typical clear zones are absent.
2. If negative, re-incubate for additional 24 hours.

Quantitative results

1. Count the plates with 20-200 typical *Staphylococcus aureus* like colonies, express as colony forming units (cfu) per g or mL of sample, taking into account the applicable dilution factor.
2. Also perform Coagulase test.

Cultural response

Cultural characteristics observed after an incubation of 24-48 hours at 30°C-35°C when added in Baird Parker Agar Base.

Organisms (ATCC)	Growth	Colour of Colony
<i>Staphylococcus aureus</i> subsp. <i>aureus</i> (25923)	Good	Grey black shiny
<i>Escherichia coli</i> (25922)	None	-
<i>Bacillus spizizenii</i> (6633)	None	-
<i>Kocuria rhizophila</i> Strain PCI 1001 (9341)	Poor	Very small brown black

Remarks

1. Do not use cracked or defected vials.
2. Good laboratory practices and hazard precautions must be observed at all times.

Warranty

This product is designed to perform as described on the label and package insert. The manufacturer disclaims any implied warranty of use and sale for any other purpose.

References

1. Practical Medical Microbiology, Mackie & McCartney, 13th Edition 1989, Edited by J.G. Collee, J.P. Daguid.
2. Ruth Gilbert and E.M. Humphreys, J Bacteriol. 1926 February; 11(2): 141 151.
3. Data on file: Microxpress®, A division of Tulip Diagnostics (P) Ltd.

Product Presentation:

Cat No.	Product description	Pack Size
204050380100	Media Selective Supplement	5 x 100 mL

Disclaimer

Information provided is based on our inhouse technical data on file, it is recommended that user should validate at his end for suitable use of the product.
