

TM 442 – TETRATHIONATE BRILLIANT GREEN BILE BROTH (as per IP/EP/BP)

INTENDED USE

For isolation and identification of Salmonellae.

PRODUCT SUMMARY AND EXPLANATION

Tetrathionate Bile Brilliant Green Broth is prepared as per the recommendation of Indian Pharmacopoeia for microbial limit tests and isolation-identification of *Salmonella* species from pharmaceutical, foods, water and other materials of sanitary importance. After incubation streak onto differential medium for isolation and identification. Medium is not suitable for growth of *Salmonella* Typhi and *Salmonella* Paratyphi. Proteus may proliferate in the medium, which can make the medium less effective.

COMPOSITION

Ingredients	Gms / Ltr
Peptone	8.600
Dehydrated Oxbile	8.000
Sodium chloride	6.400
Calcium carbonate	20.000
Potassium tetrathionate	20.000
Brilliant green	0.070

PRINCIPLE

Peptone provides nitrogenous nutrients to the Salmonellae. Brilliant green and ox-bile inhibit both gram-positive as well as some selected gram-negative organisms while it promotes the growth of *Salmonella*. Potassium tetrathionate inhibits normal flora of faecal specimens. Sodium chloride helps in maintaining osmotic equilibrium. Calcium carbonate neutralizes the acids produced by reduction of tetrathionate.

INSTRUCTION FOR USE

- Suspend 63.07 grams in 1000 ml purified/distilled water. Heat just to boiling.
- DO NOT AUTOCLAVE OR REHEAT. Dispense as desired.

Note: Due to presence of Calcium Carbonate, the prepared medium forms opalescent solution with white precipitate.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder	: Light yellow to greenish yellow homogeneous free flowing powder.
Appearance of prepared medium	: Bluish green opalescent solution with white precipitate.
pH (at 25°C)	: 7.0±0.2

INTERPRETATION

Cultural characteristics observed after enrichment in Broth Medium I at 36-38°C for 48 hours, and then subcultured on Xylose Lysine Deoxycholate Agar.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Colour of colony	Incubation Temperature	Incubation Period
<i>Salmonella Typhimurium</i>	14028	50 -100	Luxuriant	>=70 %	Red with black centres	36-38°C	18-24 Hours
<i>Salmonella Typhi</i>	6539	50 -100	Luxuriant	>=70 %	Red with black centres	36-38°C	18-24 Hours
<i>Salmonella Enteritidis</i>	13076	50 -100	Luxuriant	>=70 %	Red with black centres	36-38°C	18-24 Hours
<i>Staphylococcus aureus</i>	6538	>=10 ³	Inhibited	0%	-	36-38°C	18-24 Hours
<i>Escherichia coli</i>	8739	50 -100	Fair	20 -30 %	Yellow	36-38°C	18-24 Hours

PACKAGING:

In pack size of 500 gm bottles.

STORAGE

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 25-30°C and protect from direct sunlight. Under optimal conditions, the medium has a shelf life of 4 years. When the container is opened for the first time, note the time and date on the label space provided on the container. After the desired amount of medium has been taken out replace the cap tightly to protect from hydration.













Product Deterioration: Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

DISPOSAL

After use, prepared plates, specimen/sample containers and other contaminated materials must be sterilized before discarding.

REFERENCES

1. Indian Pharmacopoeia, 2007, Vol. II, Published by the Controller of Publications, New Delhi, Government of India, Ministry of Health and Family Welfare.
2. MacFaddin J.F., 1985, Media for Isolation-Cultivation-Identification-Maintenance of Medical Bacteria, Vol. I, Williams and Wilkins, Baltimore.

 Good Manufacturing Practices Certified	 For In Vitro Diagnostic Use	 Quantity	 Lot / Batch Number	 Catalogue Number	 Manufacturer
 Temperature Unit	 Authorized Representative	 European Conformity	 QR Code	 Consults Instructions for Use	 Best Before

NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices.



***For Lab Use Only**
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