TM 670 – BAIRD STAPHYLOCOCCUS ENRICHMENT BROTH BASE

INTENDED USE
For selective enrichment of pathogenic Staphylococci.

PRODUCT SUMMARY AND EXPLANATION
Baird Staphylococcus Enrichment Broth Base is developed from the tellurite glycine formulation of Zebovitz et al for enrichment of pathogenic *Staphylococcus*.

COMPOSITION

Ingredients	Gms / Ltr
Peptone	8.000
Yeast extract	1.000
Tryptone	2.000
Meat extract	5.000
Sodium pyruvate	10.000
Glycine	12.000
Lithium chloride	5.000

PRINCIPLE
Peptone, Tryptone, meat extract and yeast extract are sources of nitrogen, carbon, sulphur and vitamins. Sodium pyruvate not only protects injured cells and helps recovery but also stimulates Staphylococcus aureus growth without destroying selectivity. Lithium chloride and potassium tellurite inhibit most of the contaminating microflora except *Staphylococcus aureus*. Glycine, pyruvate enhances growth of *Staphylococcus*.

INSTRUCTION FOR USE
- Dissolve 43.0 grams in 990 ml purified / distilled water.
- Heat if necessary to dissolve the medium completely.
- Dispense 9.9 ml in test tubes. Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.
- Cool to less than 45°C and aseptically add 0.1 ml of Potassium Tellurite solution.
- Mix well and dispense into sterile tubes or flasks as desired.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder : Cream to yellow homogeneous free flowing powder.
Appearance of prepared medium : Light yellow coloured clear solution in tubes.
pH (at 25°C) : 6.6±0.2

INTERPRETATION
Cultural characteristics observed after incubation with added 0.1ml Potassium Tellurite solution.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Incubation Temperature	Incubation Period

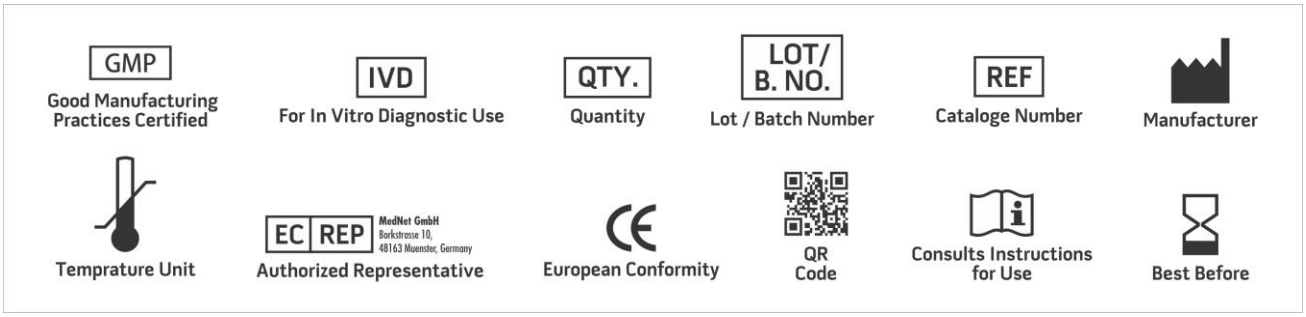
Bacillus subtilis subsp. spizizenii	6633	50-100	None-poor	35-37°C	18-24 Hours
Escherichia coli	25922	50-100	None-poor	35-37°C	18-24 Hours
Proteus mirabilis	25933	50-100	Good	35-37°C	18-24 Hours
Staphylococcus aureus subsp. aureus	25923	50-100	Good- luxuriant	35-37°C	18-24 Hours

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. Baird R.B., Eaton A.D., and Rice E.W., (Eds.), 2015, Standard Methods for the Examination of Water and Wastewater, 23rd ed., APHA, Washington, D.C.
2. Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition.
3. Jorgensen, J.H., Pfaller, M.A., Carroll, K.C., Funke, G., Landry, M.L., Richter, S.S and Warnock., D.W. (2015) Manual of Clinical Microbiology, 11th Edition. Vol. 1.
4. Salfinger Y., and Tortorello M.L., 2015, Compendium of Methods for the Microbiological Examination of Foods, 5th Ed., American Public Health Association, Washington, D.C.
5. Zebovitz E, Evans J B and Niver CF, 1955 J. Bact, 70: 686.



NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices.
***For Lab Use Only**
Revision: 08 Nov., 2019