TM 435 – T.A.T. BROTH BASE

INTENDED USE
For sterility testing of highly viscous substances such as ointments, salves and other cosmetic products.

PRODUCT SUMMARY AND EXPLANATION
T.A.T. Broth is prepared according to the formula recommended by United States Food and Drug Administration for enrichment and further isolation and cultivation of gram-negative bacteria in cosmetics, tropical drugs and in the sterility testing of viscous or gelatinous substances. It is especially adapted for the testing of cosmetics. Cosmetics and pharmaceutical products are subject to contamination during manufacturing and subsequent use by consumers. Preservatives are used in aqueous products to make them self-sterilizing for vegetative bacteria, yeasts and moulds, and bacteriostatic or bactericidal for spores. Prepare decimal dilutions of the sample to be tested from 10-1 to 10-6. Inoculate 1 gram (1 ml) sample and 1 ml of each dilution into 40 ml of T.A.T. Broth. After incubation, subculture the growth on MacConkey Agar and TSI Agar.

COMPOSITION

Ingredients	Gms / Ltr
Casein enzymic hydrolysate	20.000
Azolectin	5.000

PRINCIPLE
Casein enzymic hydrolysate provides the nitrogen, vitamins, amino acids and carbon in T.A.T. Broth Base. Azolectin and polysorbate 20 neutralize preservatives in the cosmetics or pharmaceutical products, allowing bacteria to grow.

INSTRUCTION FOR USE
- Dissolve 25 grams in 960 ml distilled water and add 40 ml of polysorbate 20.
- Heat if necessary to dissolve the medium completely.
- Dispense as desired and sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.

QUALITY CONTROL SPECIFICATIONS
Appearance of Powder : Off-white to yellow homogeneous free flowing powder.
Appearance of prepared medium : Light yellow coloured clear to slightly opalescent solution.
pH (at 25°C) : 7.2±0.2

INTERPRETATION
Cultural characteristics observed after incubation with added Polysorbate 20.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Incubation Temperature	Incubation Period
Bacillus subtilis	6633	50-100	Good-luxuriant	35-37°C	24-48 Hours
Candida albicans	10231	50-100	Good-luxuriant	35-37°C	24-48 Hours

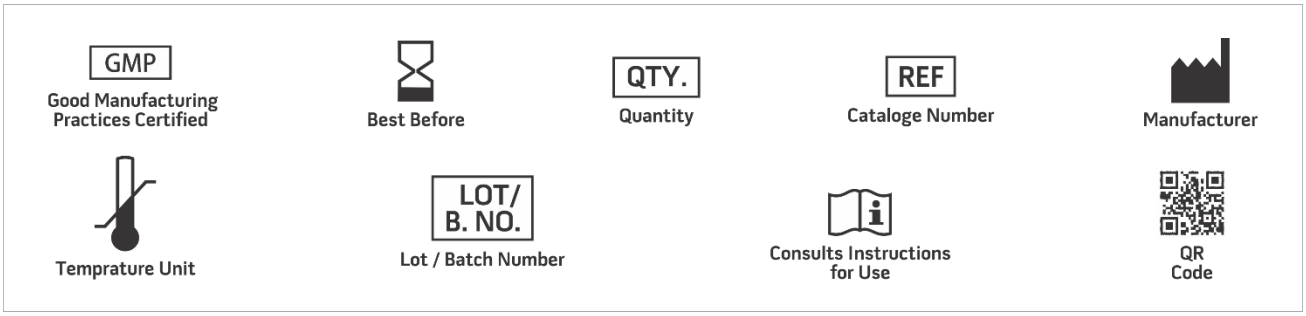
Pseudomonas aeruginosa	27853	50-100	Fair-good	35-37°C	24-48 Hours
Salmonella Typhi	6539	50-100	Good-luxuriant	35-37°C	24-48 Hours
Staphylococcus aureus	25923	50-100	Good-luxuriant	35-37°C	24-48 Hours
Staphylococcus aureus	6538	50-100	Good-luxuriant	35-37°C	24-48 Hours
Pseudomonas aeruginosa	9027	50-100	Fair-good	35-37°C	24-48 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. Food and Drug Administration, 1969, Procedure for Examination of Tropical Drugs and Cosmetics.
2. Orth, 1993, Handbook of Cosmetic Microbiology, Marcel Dekker, Inc., New York, N.Y.
3. MacFaddin J. F., 1985, Media for Isolation-Cultivation-Identification-Maintenance of Medical Bacteria, Vol. I, Williams and Wilkins, Baltimore.



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

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