TM 557 – ANAEROBIC TRYPTONE SOYA AGAR

INTENDED USE

For screening anaerobes in cosmetic products like talcum powder.

PRODUCT SUMMARY AND EXPLANATION

Anaerobic microorganisms have long been known as constituents of the normal bacterial flora of human and animal organisms. Both their pathogenic significance in medicine and their important role in food hygiene have, however, long been underestimated. During the past few years the importance of anaerobic microorganisms as pathogenic agents responsible for infectious diseases and the role they play in the microbial spoilage of food, cosmetics and water has been better appreciated. Extremely different spectra of anaerobic organisms are of importance for the examination of food, cosmetics and in the clinical microbiology. The present medium is a slight modification of Anaerobic Blood Agar formulated by Dowell et al which is a non-selective medium for the isolation and cultivation of a wide variety of obligately anaerobic microorganisms.

COMPOSITION

Ingredients	Gms / Ltr
Tryptone	15.000
Soya peptone	5.000
Sodium chloride	5.000
Yeast extract	5.000
Hemin	0.005
Vitamin K1	0.010
L-Cystine	0.400
Agar	20.000

PRINCIPLE

Tryptone Soya Agar supplemented with additional agar, yeast extract, vitamin K1, hemin and cystine improves the growth of anaerobic organisms. Tryptone, yeast extract and soya peptone in the medium provide carbon, nitrogenous compounds, and the vitamins and growth factors supply enrichment for growth of anaerobes. Sodium chloride helps in maintaining the osmotic equilibrium. Hemin, vitamin K1, cystine provide growth factors.

INSTRUCTION FOR USE

- Dissolve 50.41 grams in 1000 ml purified / distilled water.
- Heat to boiling to dissolve the medium completely.
- Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes. Cool to 45-50°C.
- Mix well and pour into sterile Petri plates.

It is recommended that the medium be reduced by keeping in anaerobic jar-incubator for 24 hours before use.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder : Cream to yellow homogeneous free flowing powder.
Appearance of prepared medium : Light amber coloured clear to slightly opalescent gel forms in Petri plates.
pH (at 25°C) : 7.5±0.2

INTERPRETATION

Cultural characteristics observed after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Incubation Temperature	Incubation Period
Bacteroides fragilis	25285	50-100	Luxuriant	>=70%	35-37°C	48 Hours
Bacteroides melaninogenicus	25611	50-100	Luxuriant	>=70%	35-37°C	48 Hours
Peptostreptococcus anaerobius	27337	50-100	Luxuriant	>=70%	35-37°C	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.

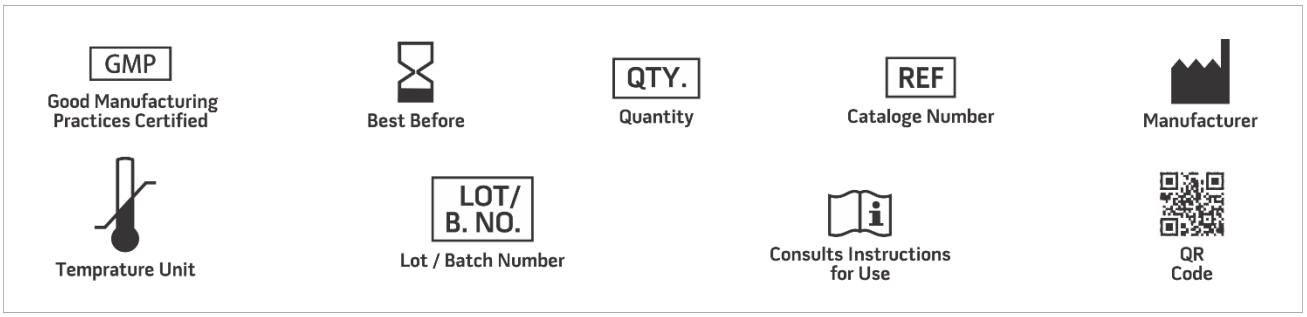
Product Deterioration: Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

DISPOSAL

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

REFERENCES

1. Dowell and Hawkins, 1979, CDC Laboratory manual, CDC, Atlanta
2. Dowell, Lombard , Thompson and Armfield, 1977, CDC Laboratory manual, CDC, Atlanta
3. Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition.
4. 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.
5. Ljungdahl L. G., Adams M. W., Barton L. L., Ferry J. G., Johnson M. K ., Biochemistry and Physiology of Anaerobic Bacteria. Microbiology.Springer publication



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

***For Lab Use Only**
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