TM 1337- CHROMOGENIC STAPHYLOCOCCUS AUREUS AGAR BASE

INTENDED USE

For isolation and identification of *Staphylococci*.

PRODUCT SUMMARY AND EXPLANATION

Chromogenic *Staphylococcus aureus* Agar Base is recommended for isolation and enumeration of coagulase positive *Staphylococcus aureus* from environment samples. Coagulase positive *S. aureus* gives brown black colonies with clear zone around the colony whereas *S. epidermidis* gives slightly brownish colonies. Other organisms give either colourless colonies or bluish coloured colonies due to the presence of chromogen. *Listeria monocytogenes* colonies are bluish in colour whereas *Bacillus*, *E. coli* and *Micrococcus* give colourless colonies.

COMPOSITION

Ingredients	Gms / Ltr
Agar	20.000
Tryptone	12.000
Sodium pyruvate	10.000
Beef extract	6.000
Yeast extract	5.000
Lithium chloride	5.000
Gelatin peptone	3.000
Chromogenic mixture	2.100

PRINCIPLE

Tryptone, Gelatin peptone, Beef extract and Yeast extract provide nitrogenous substances and other essential growth nutrients. Sodium pyruvate protects injured cells, helps recovery and enhances growth of *Staphylococcus*. Lithium chloride and potassium tellurite inhibit most of the contaminating microflora except *Staphylococcus aureus*. Due to addition of egg yolk, proteolytic bacteria produce a clear zone around colony

INSTRUCTION FOR USE

- Dissolve 63.1 grams in 950 ml distilled water.
- Gently heat to boiling with swirling to dissolve the medium completely.
- Sterilize by autoclaving at 15 psi (121°C) for 15 minutes.
- Cool to 45 - 50°C.
- Aseptically add 50 ml concentrated Egg yolk Tellurite Emulsion (TS 001).
- Mix well and pour into sterile Petri plates.

QUALITY CONTROL SPECIFICATIONS

Appearance of powder : Cream to yellow homogeneous free flowing powder

Appearance of prepared medium : Yellow coloured, opaque gel

pH (at 25°C) : 7.0±0.2

INTERPRETATION

Cultural characteristics observed after incubation with addition of Egg Yolk Tellurite Emulsion (TS 001) after incubation. Recovery rate is considered 100% for bacteria growth on Soya Agar.

Microorganism	ATCC	Inoculum	Growth	Recovery	Colour of	Lecithinase	Incubation	Incubation

		(CFU/ml)			colony	activity	Temp.	Period
Bacillus subtilis	6633	50-100	None to Poor	<=10%	Colourless	-	35 ± 2°C	24-48 Hours
Escherichia coli	25922	50-100	None to Poor	<=10%	Colourless	-	35 ± 2°C	24-48 Hours
Listeria monocytogenes	19112	50-100	Fair - Good	30-40%	Bluish	-	35 ± 2°C	24-48 Hours
Micrococcus luteus	10240	50-100	None to Poor	<=10%	Colourless	-	35 ± 2°C	24-48 Hours
Staphylococcus aureus	25923	50-100	Good	40-50%	Brown-black	+	35 ± 2°C	24-48 Hours
Staphylococcus epidermidis	12228	50-100	None to Poor	<=10%	Yellow-slight brownish	-	35 ± 2°C	24-48 Hours

+= Positive reaction, halo or clear zone around the colony
-= Negative reaction

PACKAGING

In pack size of 100gm & 500gm bottles.

STORAGE

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 10-25°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.

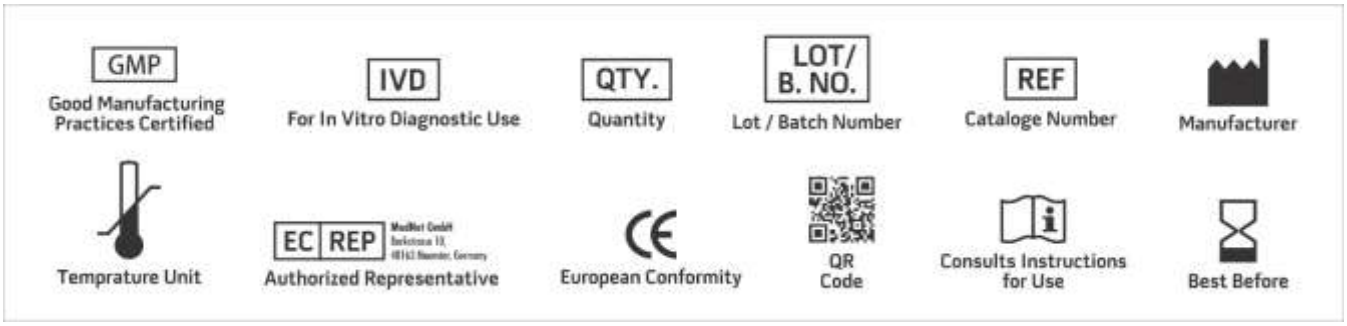
Product Deterioration: Do not use if powder show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

DISPOSAL

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

REFERENCES

1. Baird Parker, Ac (1962) J appl. Bact., 25:12.



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

***For Lab Use Only**

Revision: 8 July, 2024