TM 1042 - MILK SALT AGAR BASE

INTENDED USE
For selective isolation and cultivation of *Staphylococcus* species.

PRODUCT SUMMARY AND EXPLANATION
Milk Salt Agar is used for selective isolation and cultivation of Staphylococci. Koch reported that only Staphylococci could grow on agar media containing 7.5% sodium chloride. Chapman in his modification of the Kochs medium utilized this property for making the medium selective by the high salt content.

COMPOSITION

Ingredients	Gms / Ltr
Peptic digest of animal tissue	5.000
Beef extract	3.000
Sodium chloride	65.000
Agar	15.000

PRINCIPLE
This is a simple but nutritious medium. Beef extract, peptic digest of animal tissue and skim milk supply essential nutrients mainly nitrogenous and carbonaceous compounds including trace ingredients to Staphylococci. Sodium chloride at a concentration of 6.5% makes the medium highly selective as majority of the contaminating organisms are inhibited by the high salt concentration, but Staphylococci are able to tolerate the high sodium chloride concentration.

INSTRUCTION FOR USE
- Dissolve 88 grams in 900 ml distilled water.
- Heat to boiling to dissolve the medium completely.
- Dispense and sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.
- Cool to 60°C. Aseptically add 10 ml of sterile skim milk (10% w/v skim milk powder solution) to every 90 ml of basal medium.
- Mix well and pour into sterile Petri plates.

QUALITY CONTROL SPECIFICATIONS
Appearance of Powder : Off-white to yellow homogeneous free flowing powder.

Appearance of prepared medium : Yellow coloured opaque gel forms in Petri plates after addition of 10%v/v sterile milk

pH (at 25°C) : 7.4±0.2

INTERPRETATION
Cultural characteristics observed after an incubation.

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

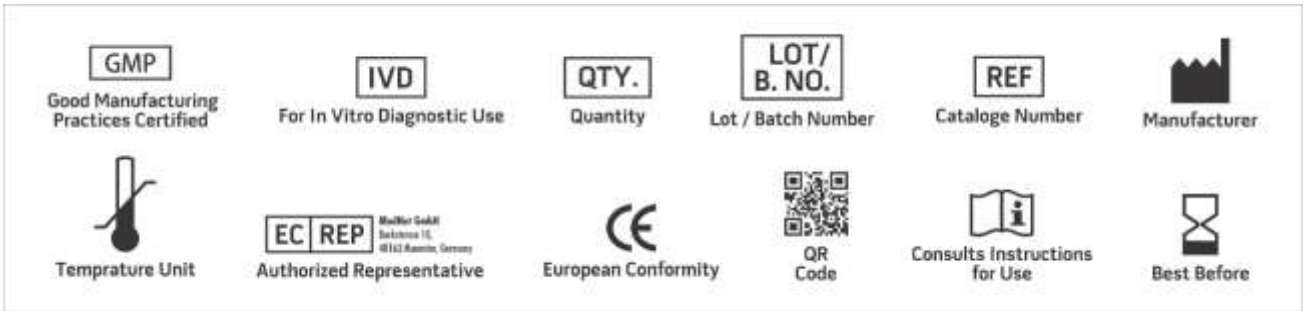
Escherichia coli	25922	>=10^3	Inhibited	0%	35-37°C	18-48 Hours
Staphylococcus aureus	25923	50-100	Good-luxuriant	>=50 %	35-37°C	18-48 Hours

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. Koch, 1942, Zentralbl. Bakteriol. Parasitenkd. Abt. I. Orig., 149:122.
2. Chapman, 1946, J. Bacteriol., 51:409.
3. Rechcigl M., Jr. (Ed.), 1978, CRC Handbook Series in Nutrition and Food, Section G., Vol. III, CRC Press, Inc., Ohio, U.S.A



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