CM 20360 – CAE AGAR BASE (CITRATE AZIDE ENTEROCOCCUS AGAR BASE)

INTENDED USE

For detection of Enterococci in Meat, dairy product and other food products.

PRODUCT SUMMARY AND EXPLANATION

Enterococci are widelydistributedin the environment, principally inhabiting the human and animal gastrointestinal tract. The resistance of Enterococci to pasteurization temperatures and their adaptability to different substrates and growth conditions (low and high temperature, extreme pH and salinity) implies that they can be found either in food products manufactured from raw materials or in heat-treated food products. In general, Enterococci serve as a good index of sanitation and proper holding conditions. CAE (Citrate Azide Enterococcus) Agar Base was initially formulated by Burkwall and Hartmann and later modified by Reuter. The medium is used for the identification of enterococci in food products.

COMPOSITION

Ingredients	Gms / Ltr
Tryptone	15.000
Yeast extract	5.000
Potassium dihydrogen phosphate	5.000
Sodium citrate	15.000
Polysorbate 80 (Tween 80)	1.000
Sodium carbonate	2.000
Sodium azide	0.400
Agar	15.000

PRINCIPLE

Tryptone and yeast extract serve as sources of carbon, nitrogen, amino acids, vitamins and other essential nutrients. Potassium dihydrogen phosphate has a buffering action. Sodium citrate along with sodium azide helps to inhibit the accompanying contaminating flora. Polysorbate 80 serves as the fatty acid source. Enterococci reduce the colourless 2, 3, 5 Triphenyl Tetrazolium Chloride to form a red coloured complex, formazan, thereby imparting a red colour to the enterococcal colonies.

INSTRUCTION FOR USE

Dissolve 58.4gramsin 990 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 and aseptically add contents of 1 vial of TTC Solution, 1%.
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, clear to slightly opalescent gel forms in Petri plates.
pH (at 25°C)	: 7.0±0.2

INTERPRETATION

Cultural characteristics observed after incubation with added TTC solution.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Colour of colony	Incubation Temperature	Incubation Period
Enterococcus faecalis	29212	50-100	Good-luxuriant	>=50%	Red	35-37°C	24-48 Hours
Escherichia coli	25922	>=10^4	Inhibited	0%	-	35-37°C	24-48 Hours
Staphylococcus aureus subsp. aureus	25923	>=10^4	Inhibited	0%	-	35-37°C	24-48 Hours
Streptococcus pyogenes	12344	50-100	None-poor	0-10%	-	35-37°C	24-48 Hours

PACKAGING:

Inpacksizeof500 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

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

REFERENCES

1. Burkwall M.K.and Hartman P. A., 1964, Appl. Microbiol., 12:18.
2. Foulquie Moreno M. R., Sarantinopoulos P., Tsakalidou F., De Vuyst L, 2006, Int. J. Food Microbiol., 106 (1) :1.
3. Reuter G., 1968, Arch. f. Lebensmittethyg., 19:53.
4. Saraswat D. S. et al, J. Milk Food Techn., 26:114

GMP Good Manufacturing Practices Certified
Best Before
QTY. Quantity
REF Catalogue Number
Manufacturer
Temprature Unit
LOT/ B. NO. Lot / Batch Number
Consults Instructions for Use
QR Code

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

*ForLabUseOnly