CM 22559 – NUTRIENT AGAR PLATE

INTENDED USE

A general purpose medium used for cultivation of wide variety of microorganisms.

PRODUCT SUMMARY AND EXPLANATION

Nutrient media are basic culture mediaus edfor cultivation and enumeration of bacteria which are not particularly fastidious and maintaining microorganisms, cultivating fastidious organisms by enriching with serum or blood and are also used for purity checking prior to biochemical or serological testing.
Nutrient Agar is ideal for demonstration and teaching purposes where a more prolonged survival of cultures at ambient temperature is often required without risk of overgrowth that can occur with more nutritious substrate. This relatively simple formula has been retained and is still widely used in the microbiological examination of variety of materials and is also recommended by standard methods. It is one of the several non-selective media useful in routine cultivation of microorganisms.

COMPOSITION

Ingredients	Gms / Ltr
Tryptone	5.000
Sodium chloride	5.000
Agar	15.000
Beef Extract	1.500
Yeast extract	1.500

PRINCIPLE

Peptone, Beef extract and yeastextract provide the necessary nitrogen compounds, carbon, vitamins and also some trace ingredients necessary for thegrowth of bacteria. Sodium chloride maintains the osmotic equilibrium of the medium. Addition of different biologicalfluids such as horse or sheep blood, serum, egg yolk etc. makes it suitable for the cultivation of related fastidiousorganisms.

INSTRUCTION FOR USE

Eitherstreak,inoculateorsurface spread the test inoculum aseptically on the plate.

QUALITY CONTROL SPECIFICATIONS

Appearance	:	Light yellow color medium.
Quantity of Medium	:	25ml of medium in 90mm plates.
pH (at 25°C)	:	7.4± 0.2
Sterility Check	:	Passes release criteria

INTERPRETATION

Culturalresponsewasobserved after incubation.

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

Escherichia coli	25922	50-100	Good-Luxuriant	>=50%	30-35°C	18-48 Hours
Pseudomonas aeruginosa	27853	50-100	Good-Luxuriant	>=50%	30-35°C	18-48 Hours
Streptococcus pyogenes	19615	50-100	Good-Luxuriant	>=50%	30-35°C	18-48 Hours
Staphylococcus aureus subsp. aureus	25923	50-100	Good-Luxuriant	>=50%	30-35°C	18-48 Hours

PACKAGING:

Doubledlayered packing containing 5 No. of plates with one silica gel desiccant bag packed inside it.

STORAGE

Onreceipt,store the plates at 15–30 °C. Avoid freezing and overheating. Do not open until ready to use. Prepared plates stored in their original sleeve wrapping until just prior to use may be inoculated up to the expiration date and incubated for recommended incubation times. Allow the medium to warm to room temperature before inoculation.

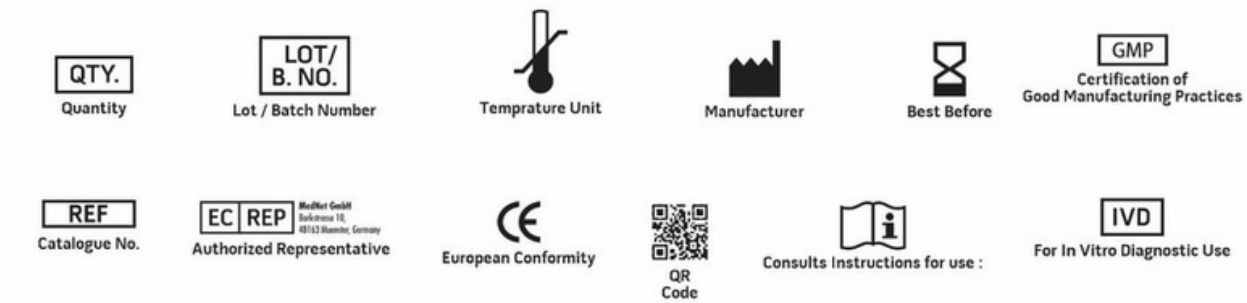
Product Deterioration: Do not use plates if they show evidence of microbial contamination, discoloration, drying, cracking or other signs of deterioration.

DISPOSAL

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

REFERENCES

1. American Public Health Association, Standard Methods for the Examination of Dairy Products, 1978, 14th Ed., Washington D.C
2. Salfinger Y., and Tortorello M.L., 2015, Compendium of Methods for the Microbiological Examination of Foods, 5th Ed., American Public Health Association, Washington, D.C..
3. . Lapage S., Shelton J. and Mitchell T., 1970, Methods in Microbiology', Norris J. and Ribbons D., (Eds.), Vol. 3A, Academic Press, London.
4. MacFaddin J. F., 2000, Biochemical Tests for Identification of Medical Bacteria, 3rd Ed., Lippincott, Williams and Wilkins, Baltimore



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