CM 20,012 – ACETAMIDE AGAR (DOUBLE PACK)

INTENDED USE

Forconfirmationof Pseudomonas aeruginosa in water samples.

PRODUCTSUMMARY AND EXPLANATION

Acetamide Agaris formulatedas perthe recommendation of Standard Methods for the Examination of Water and Wastewater. Gilardi and others showed that a wide variety of non-fermenting organisms were capable of utilizing acetamide by using basal mineral media. However very few organisms growing in the medium metabolize acetamide by the process of deamination (acrylamidase activity). This unique ability is useful in identification of various non-fermenting gram-negative organisms. This ability is shown by Pseudomonas aeruginosa, Pseudomonas aciovorans Group III (Achromobacter xylosoxidans) and Alcaligenes odorans.

COMPOSITION

Ingredients	Gms / Ltr
Part I	
Acetamide	10.000
Part II	
Sodium chloride	5.000
Dipotassium hydrogen phosphate	1.390
Potassium dihydrogen phosphate	0.730
Phenol red	0.012
Magnesium sulphate	0.500
Agar	15.000

PRINCIPLE

Acetamide deamination leads to the liberation of ammonia,which thereby increases the pH of the medium, leading to a subsequent colour change of the phenol red indicator fromyellow orange to purplish red. Some strains require upto seven days to exhibit a positive reaction as they deaminate acrylamide slowly. However, only about 40% of apyocyanogenic strains of Pseudomonas aeruginosa exhibitapositive reaction. It is therefore, not advisable to rely on this test as the only criterion for identification. The mediumcontains inorganic salts and acetamide a sole carbon and nitrogen source. Sodium chloride maintains the osmotic equilibrium. Phenol red is the pH indicator.

INSTRUCTION FOR USE

Suspend 22.63 grams of part II in 1000 ml purified / distilled water.
Add 10.0 grams of Part I and heat to boiling to dissolve the medium completely.
Dispense in tubes or flasks as desired.
Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.
Cool the tubes in a slanted position.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder	: Part I: Colourless deliquescent crystals Part II: Light yellow to brick red homogeneous free flowing powder
Appearance of prepared medium	: Orange coloured clear to slightly opalescent gel forms in tubes as slants.
pH (at 25°C)	: 7.0±0.2

INTERPRETATION

Culturalcharacteristics observed after incubation.

Microorganism	ATCC	Inoculum (CFU)	Growth	Deamination	Incubation Temperature	Incubation Period
Stenotrophomonas maltophila	13637	50-100	Good-luxuriant	Negative reaction ,no purplish red colour within 7 days	35-37°C	4-7 Days
Pseudomonas aeruginosa	27853	50-100	Good-luxuriant	Positive reaction, purplish red colour within 7 days	35-37°C	4-7 Days

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

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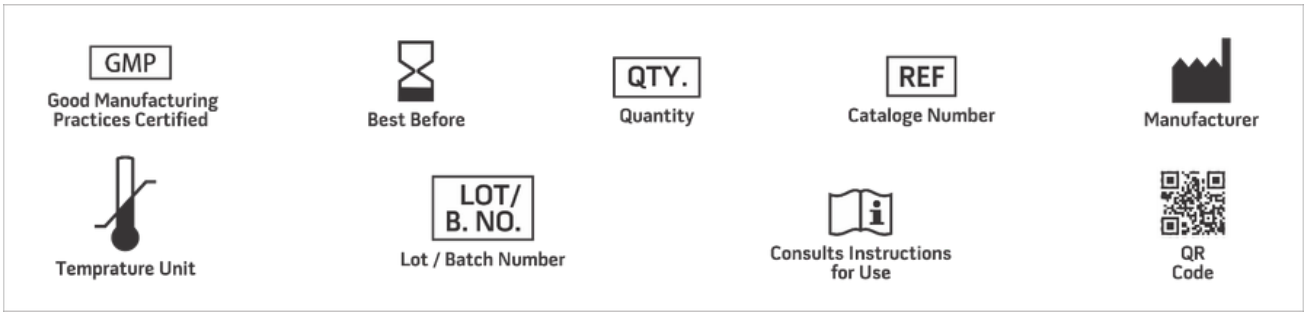

NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices.

*For Lab Use Only