TRM 269 –R-2A AGAR

INTENDED USE
For heterotrophic plate count of treated potable water using longer incubation time.

PRODUCT SUMMARY AND EXPLANATION
R-2A AGAR was formulated by Reasoner and Geldreich for heterotrophic plate count of treated potable water. It is recommended in standard methods for pour plate, spread plate, and membrane filter methods for heterotrophic plate counts. Nutritionally rich media support the growth of fast growing bacteria which may suppress slow growing and/or stressed bacteria found in treated water. R-2A agar being low in nutrition, also helps to stimulates the growth of stressed and chlorine-tolerant bacteria at lower incubation temperature and longer incubation period.

COMPOSITION

Ingredients	Gms / Ltr
Agar	15.000
Casein acid hydrolysate	0.500
Yeast extract	0.500
Dextrose	0.500
Proteose peptone	0.500
Starch, soluble	0.500
Di-potassium hydrogen phosphate	0.300
Sodium pyruvate	0.300
Magnesium sulphate	0.024

PRINCIPLE
Casein acid hydrolysate, proteose peptone and yeast extract serve as carbon, nitrogen, vitamins, trace elements and minerals sources in the medium. Dextrose serves as a fermentable carbohydrate source. Soluble starch supports the recovery of injured organisms by absorbing toxic metabolic by-products. Dipotassium phosphate is used to balance the pH. Magnesium sulphate is a source of divalent cations and sulphate. Sodium pyruvate increases the recovery of stressed cells. Agar is the solidifying agent.

INSTRUCTION FOR USE
1. Prior to use, medium in the bottle can be melted either by using a pre-heated water bath or any other method.
2. Slightly loosen the cap before melting.
3. Pour liquefied agar into each plate as desired and allow them to solidify at room temperature. Plates are now ready to inoculate or refrigerate for later use.

Note: It is a ready to use solid media in glass bottle. The medium is pre-sterilized; hence sterilization is not required.

QUALITY CONTROL SPECIFICATIONS

Appearance	:	Light beige color, clear to slightly opalescent gel.
Quantity of Medium	:	100 ml of the medium in glass bottle
pH (at 25°C)	:	7.2± 0.2
Sterility Check	:	Passes release criteria

INTERPRETATION
Cultural characteristics observed after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Incubation Temperature	Incubation Period
Enterococcus faecalis	29212	50-100	Good-Luxuriant	>=70%	35–37°C	24–72 hours
Escherichia coli	25922	50-100	Good-Luxuriant	>=70%	35–37°C	24–72 hours
Escherichia coli	8739	50-100	Good-Luxuriant	>=70%	35–37°C	24–72 hours
Staphylococcus aureus	25923	50-100	Good-Luxuriant	>=70%	35–37°C	24–72 hours
Staphylococcus aureus	6538	50-100	Good-Luxuriant	>=70%	35–37°C	24–72 hours
Staphylococcus epidermidis	12228	50-100	Good-Luxuriant	>=70%	35–37°C	24–72 hours
Salmonella typhi	6539	50-100	Good-Luxuriant	>=70%	35–37°C	24–72 hours
Salmonella enteritidis	13076	50-100	Good-Luxuriant	>=70%	35–37°C	24–72 hours
Pseudomonas aeruginosa	27853	50-100	Good-Luxuriant	>=70%	35–37°C	24–72 hours
Bacillus subtilis	6633	50-100	Good-Luxuriant	>=70%	35–37°C	24–72 hours

PACKAGING:
100 ml glass bottle sealed with rubber stopper.

STORAGE
On receipt, store bottles in the dark at 10 to 25° C. Avoid freezing and overheating. The medium may be used up to the expiration date and incubated for the recommended incubation times. Bottles from unopened packages can be used up to the expiration date. Opened bottles must be used immediately. To prepare plates or tubes from the bottled medium, it must first be liquefied. Do not liquefy any leftovers for a second time
Product Deterioration: Do not use bottles if they show evidence of microbial contamination, discoloration, 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. Clesceri L. S., Greenberg A. E. and Eaton A. D., (Ed.), 1998, Standard Methods for the Examination of Water and Waste water, 20th Ed., American Public Health Association, Washington, D.C.
2. Downes F. P. and Ito K., (Eds.), Compendium of Methods for the Microbiological Examination of Foods, 4th Ed.,American Public Health Association, Washington, D.C.
3. Reasoner D. J. and Geldreich E. E., 1985, Appl. Environ. Microbiol., 49:1.
4. Collins V. J. and Willoughby J. G., 1962, Arch. Microbiol., 43:294.
5. European Pharmacopoeia 8.0 (2014) Monographs: Water for injections; Water, highly purified; Water purified.
6. Japanese Pharmacopoeia 16th edition (2011), Section G8 4.4.2.

Quantity

Lot / Batch Number


Temprature Unit


Manufacturer


Best Before

Certification of
Good Manufacturing Practices

Catalogue No.

Authorized Representative


European Conformity


QR
Code


Consults Instructions for use :

For In Vitro Diagnostic Use

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

***For Lab Use Only**

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