

TM 897 – TRYPTONE YEAST EXTRACT AGAR

INTENDED USE

For estimation of microbial counts in water.

PRODUCT SUMMARY AND EXPLANATION

Periodic sampling and determination of microbial counts of water used for recreation such as beaches etc, open natural/man made reservoir is important. The total count might be indicative of the overall sanitary conditions at that site. Tryptone Yeast Extract Agar is formulated as described by ISO Committee for the enumeration of viable microorganisms in water under the specification ISO 6222:1988.

COMPOSITION

Ingredients	Gms / Ltr	
Tryptone	6.000	
Yeast extract powder	3.000	
Agar	12.000	

PRINCIPLE

Tryptone and yeast extract provide nitrogenous compounds, vitamin B complex and other essential growth nutrients. Total colony forming units (CFU) from the water samples to be tested is obtained either by spread plate or by pour plate technique.

INSTRUCTION FOR USE

- Suspend 21 grams in 1000 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. 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 : Light amber coloured clear to slightly opalescent gel forms in Petri plates.

pH (at 25°C) : 7.2±0.2

INTERPRETATION

Cultural characteristics observed after incubation at different temperatures.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Incubation Temperature	Incubation Period
Klebsiella aerogenes	13048	50-100	Luxuriant	>=70%	35-37°C	18-24 Hours









Escherichia coli	25922	50-100	Luxuriant	>=70%	35-37°C	18-24 Hours
Salmonella Typhimurium	14028	50-100	Luxuriant	>=70%	35-37°C	18-24 Hours
Salmonella Enteritidis	13076	50-100	Luxuriant	>=70%	35-37°C	18-24 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.

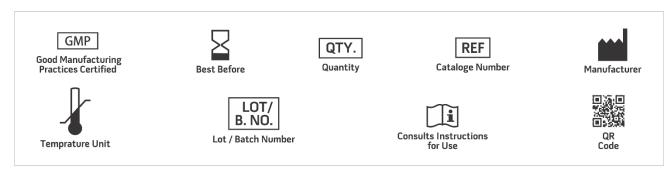
Product Deterioration: Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

DISPOSAL

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

REFERENCES

- 1.Corry J. E. L., Curtis G. D. W., and Baird R. M., Culture Media for Food Microbiology, Vol. 34, Progress in Industrial Microbiology, 1995, Elsevier, Amsterdam
- 2. International Organization for Standardization (ISO), 1988, Draft ISO/DIS 6222.



NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices. *For Lab Use Only Revision: 08 Nov., 2019





