YEAST EXTRACT AGAR

Nutrient medium for the plate count of organism in water, according to ISO 6222.

TYPICAL FORMULA	(g/l)
Tryptone	6.0
Yeast Extract	3.0
Agar	15.0
Final pH 7.2 ± 0.2	

DESCRIPTION

YEAST EXTRACT AGAR is a nutrient medium used for the enumeration of organism in water by the pour plate method, according to ISO 6222.

PRINCIPLE

Tryptone supplies nitrogen, vitamins, minerals and essential amino acids for the microbial growth. Yeast extract is a source of vitamins, particularly of B-Group. Agar is the solidifying agent.

PREPARATION

For use, melt the medium and allow to cool at 45±1°using a water bath. Maintain the medium at 45°C no longer than 4 hours, after which the medium should be discarded.

TECHNIQUE

1. Prepare appropriate decimal dilutions of the water sample (with Ringer Solution, ref. 81059) and pipette 1 ml portions of the water and each dilution into duplicate sterile Petri dishes.
2. Add 15-20 ml of the medium (previously melted and cooled to 45°C) to each plate and mix carefully by gentle rotation. Note, time between addition of the test sample (or its dilution) and addition of the molten medium should not exceed 15 min.
3. Allow to solidify, inver the plates and incubate one set at 36±2°C for 44±4 h and the other set at 22±2°C for 68±4 h.

INTERPRETATION OF RESULTS

Select plates containing 30-300 colonies for counting and express the results as the number of colony-forming units per millilitre (CFU/ml) of the sample for each temperature of incubation..

STORAGE

10-25°C away from light, until the expiry date on the label or until signs of deterioration or contamination are evident.

WARNING AND PRECAUTIONS

The product does not contain hazardous substances in concentrations exceeding the limits set by current legislation and therefore is not classified as dangerous. It is nevertheless recommended to consult the safety data sheet for its correct use. The product is designed for professional use only and must be used by properly trained operators.

DISPOSAL OF WASTE

Disposal of waste must be carried out according to the national and local regulations in force.

REFERENCES

1. Windle Taylor E. (1958) The Examination of Waters and Water Supplies. 7th ed. Churchill Ltd., London, 394-398 and 778.
2. ISO 6222: 1999. Water quality – Enumeration of culturable micro-organisms – Colony count by inoculation in a nutrient agar culture medium.

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PRODUCT SPECIFICATIONS

NAME
YEAST EXTRACT AGAR

PRESENTATION
Glass tubes containing 20 ml of medium

STORAGE
10-25°C

PACKAGING

Ref.	Content	Packaging
34074	20 tubes x 20 ml	20 tubes in cardboard box
26074	100 tubes x 20 ml	100 tubes in cardboard box

pH OF THE MEDIUM
7.2 ± 0.2

USE
YEAST EXTRACT AGAR is a nutrient medium used for the enumeration of organism in water by the poured plate method, according to ISO 6222

TECHNIQUE
Refer to technical sheet of the product

APPEARANCE OF THE MEDIUM
Amber medium

SHELFLIFE
2 years

QUALITY CONTROL
1. Control of general characteristics, label and print
2. Sterility control
   7 days at 22 ± 1°C, in aerobiosis
   7 days at 36 ± 1°C, in aerobiosis
3. Microbiological control
   Inoculum for productivity: 10-100 UFC/ml
   Incubation Conditions: 48 h at 36 ± 1°C and 72 h at 22 ± 1°C.

Microorganism		Growth at 36°C after 48 h	Growth at 22°C after 72 h
Escherichia coli	ATCC® 25922	Good	Inhibited
Staphylococcus aureus	ATCC® 25933	Good	Inhibited
Candida albicans	ATCC® 10131	Inhibited	Good

TABLE OF SYMBOLS

LOT Batch code	Do not reuse	Manufacturer	Use by	Fragile, handle with care
REF Catalogue number	Temperature limitation	Contains sufficient for <n> tests	See instruction for use	

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