YEAST EXTRACT AGAR

A nutrient agar for the plate count of organisms in water.

TYPICAL FORMULA (g/l)

Tryptone	6
Yeast Extract	3
Agar	15

DIRECTIONS

Suspend 24 g in 1 litre of distilled water. Heat to boiling with agitation until complete dissolution and autoclave at 121°C for 15 minutes. Cool to 50°C and distribute into sterile Petri dishes.
Final pH: 7.2 ± 0.2

DESCRIPTION

Yeast Extract Agar is prepared according to the formula described by Windle Taylor. This medium is recommended by ISO 6222 for the plate count of microorganisms in water.

TECHNIQUE

1. Prepare appropriate decimal dilutions of the water sample and pipette 1ml portions of the water and each dilution into duplicate sterile Petri dishes.
2. Add 15ml of Yeast Extract Agar cooled to 45-50°C to each plate. Mix the contents by circular
3. Allow to solidify, and incubate duplicate sets of plates for 24 hours at 37°C and 3 days at 20-22°C respectively.
4. Select plates containing 30-300 colonies for counting. No count should be made on a plate containing less than 30 colonies unless the plates from the undiluted water contain less than this number.

USER QUALITY CONTROL (37°C 24 h)
Positive control:
Escherichia coli ATCC 25922
Negative control:
Uninoculated medium

STORAGE

Dehydrated medium : store at 10-30°C
User prepared flasks : at 2-8°C for 1 month

REFERENCES

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

PACKAGING

4022752	**Yeast Extract Agar**	**500 g (20.8 l)**
492275	**Yeast Extract Agar**	**30 ready to use plates (55 mm)**