

Yeast Extract Agar modified for ISO 6222

84683.0500

84683.5000

Also known as

Yeast Extract Agar, Modified

Intended use

Medium for enumeration of microorganisms from water according to the ISO 6222-1999

Formula-Composition in g/L**

Ingredients	g/L
Tryptone	6.000
Yeast extract	3.000
Agar	15.000
Final pH (at 25°C)	7.2±0.2

**Formula adjusted, standardized to suit performance parameters

Instructions for preparation

Suspend 24 grams in 1000 ml purified / distilled water. Heat to boiling to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Dispense as desired.

Principle of the method and general information

Yeast Extract Agar modified for ISO 6222 is a non selective medium in accordance with ISO specification 6222:1999 for enumeration of microorganisms from water.

Necessary growth nutrients are provided by tryptone and yeast extract. These serve as source of nitrogen, vitamins, growth factors as well as crude source of carbon. Agar acts as a solidifying agent.

Instruction for use

Prepare dilutions of water sample to be tested in duplicates. Pour the cooled molten Yeast Extract Agar for ISO 6222 and incubate the plates at two different temperatures , 34-38°C for 40-48 hours for bacteria and 20-24°C for 64-72 hours in case of fungi.

Limitations

Due to the nutritional variants , certain organisms may show poor growth or may fail to grow on this medium

Quality Control
Appearance

Cream to yellow coloured homogeneous free flowing powder

Gelling

Firm, comparable with 1.5% Agar gel

Colour and Clarity of prepared medium

Yellow coloured clear to very slightly opalescent gel forms in Petri plates.

Reaction

Reaction of 2.4% w/v aqueous solution at 25°C. pH : 7.2±0.2

pH

7.00-7.40

Cultural Response

Cultural characteristics observed after an incubation at 35 - 37°C for 18 - 24 hours.

Cultural Response

Organism	Inoculum (CFU)	Growth	Recovery
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<i>Enterobacter aerogenes</i> ATCC 13048	50-100	good	$\geq 70\%$
<i>Escherichia coli</i> ATCC 25922	50-100	good	$\geq 70\%$
<i>Pseudomonas aeruginosa</i> ATCC 27853	50-100	good	$\geq 70\%$
<i>Staphylococcus aureus</i> ATCC 25923	50-100	good	$\geq 70\%$

Reference

1. ISO 6222:1999 Water quality enumeration of culturable microorganisms Colony count by incubation in a nutrient agar culture medium.

Storage conditions

Store below 30°C in tightly closed container and the prepared medium at 2 - 8°C. Use before expiry period on the label.

Ordering information

84683.0500	Yeast Extract Agar modified for ISO 6222	Bottle of 500g
84683.5000	Yeast Extract Agar modified for ISO 6222	Drum of 5Kg