

BAT AGAR

Medium for detection of *Alicyclobacillus* spp in fruit juices and other beverages.

TYPICAL FORMULA	(g/l)		(mg/l)
Yeast Extract	2.00	Zinc Sulphate	0.18
Glucose	5.00	Cupric Sulphate	0.16
Potassium Di-hydrogen Phosphate	3.00	Manganese Sulphate	0.15
Calcium Chloride	0.25	Cobalt Chloride	0.18
Magnesium Sulphate	0.50	Boric Acid	0.10
Ammonium Sulphate	0.20	Sodium Molybdate	0.30
Agar	20.00	Final pH 4.0 ± 0.2 at 25°C	

DESCRIPTION

BAT AGAR is a medium used for the detection of *Alicyclobacillus* spp in fruit juices and other beverages.

PRINCIPLE

Yeast extract is a source of vitamins, particularly of B-group. Glucose is the fermentable carbohydrate providing carbon and energy. Potassium di-hydrogen phosphate is the buffer. The medium is especially characterized by the presence of several minerals and trace elements. Agar is the solidifying agent. The low pH in combination with the high incubation temperature inhibit the contaminating flora.

PREPARATION

Suspend 31 g of powder in 1 liter of distilled water. Heat until completely dissolved. Autoclave at 121°C for 15 minutes. ADJUST THE pH AFTER AUTOCLAVATION, specifically cool to 45-50°C and lower the pH to 4.0 ± 0.2 adding 1.7 ml 1 N sulphuric acid. Homogenize gently. Distribute in Petri dishes.

TECHNIQUE

Inoculate the plate by spreading the sample onto the agar surface. Membrane filter technique can be used with samples being filterable. Incubate for 3-5 days at 45°C.

INTERPRETATION OF RESULTS

All colonies grown on the BAT AGAR are suspicious. Confirm by further testing.

STORAGE

The powder is very hygroscopic, store the powder at 10-30°C, in a dry environment, in its original container tightly closed and use it before the expiry date on the label or until signs of deterioration or contamination are evident. Store prepared plates at 2-8°C away from light.

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 must be used only by properly trained operators.

DISPOSAL OF WASTE

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

REFERENCES

1. Baumgart, J. and Menje, S. (2000) The Impact of *Alicyclobacillus* acidoterrestris on the Quality of Juices and Soft Drinks. *Fruit Processing* 7:251-254
2. IFU Working Group Microbiology (2003) First Standard IFU-Method on the Detection of *Alicyclobacillus* in Fruit Juices.



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PRODUCT SPECIFICATIONS

NAME

BAT AGAR

PRESENTATION

Dehydrated medium

STORAGE

10-30°C

PACKAGE

Ref.	Content	Packaging
610361	500 g	500 g of powder in plastic bottle

pH OF THE MEDIUM

4.0 ± 0.2

USE

BAT AGAR is a medium used for the detection of *Alicyclobacillus* spp in fruit juices and other beverages

TECHNIQUE

Refer to technical sheet of the product

APPEARANCE OF THE MEDIUM

Dehydrated medium

Appearance: free-flowing, homogeneous

Colour: beige

Prepared medium

Appearance: slightly opalescent

Colour: amber

SHELF LIFE

4 years

QUALITY CONTROL

- Control of general characteristics, label and print
- Microbiological control
Inoculum for productivity: 10-100 CFU/ml
Incubation conditions: 3-5 days at 45 ± 1°C

Microorganism

Alicyclobacillus acidocaldarius ATCC® 27009

Alicyclobacillus acidoterrestris ATCC® 49025

Escherichia coli ATCC® 25922










Growth

Good

Good

Inhibited

TABLE OF SYMBOLS

 LOT	Batch code	 Keep away from heat sources	 Manufacturer	 Use by	 Fragile, handle with care
 REF	Catalogue number	 Temperature limitation	 Contains sufficient for <n> tests	 Consult instruction for use	



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