THERMOACIDURANS AGAR

Medium for isolating and cultivating *Bacillus coagulans* (*Bacillus thermoacidurans*) from foods.

TYPICAL FORMULA (g/L)

Yeast Extract	5.0
Peptone	5.0
Glucose	5.0
Dipotassium Phosphate	4.0
Agar	20.0
Final pH =5.0 ± 0.05 at 25°C	

DESCRIPTION

THERMOACIDURANS AGAR is a medium for isolating and cultivating *Bacillus coagulans* (*Bacillus thermoacidurans*) from foods. *B. coagulans* is a soil microorganism that can be found in canned tomato products and dairy products. Conditions favorable to multiplication of the organism can result in spoilage of the food product. **THERMOACIDURANS AGAR** can also be used to isolate mesophilic spore-forming anaerobes (*Clostridium* spp.) from foods.

PRINCIPLE

Peptone provides the carbon and nitrogen for general growth requirements. Yeast extract supplies B-complex vitamins which stimulate bacterial growth. Glucose is the carbohydrate source. Agar is the solidifying agent.

PREPARATION

Suspend 39.0 g of powder in 1 litre of distilled or deionized water. Heat until completely dissolved. Sterilize in the autoclave at 121 °C for 15 minutes.

TECHNIQUE

Inoculate the medium with the sample to examine. Incubate at 55 ± 1°C for 18-48 hours.

INTERPRETATION OF RESULTS

Observe for the growth of microorganisms. Microorganisms other than *B. coagulans* may grow on this medium. Perform microscopic examination and biochemical tests to identify to genus and species if necessary.

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 media at 2-8°C.

WARNING and PRECAUTIONS

The product is not classified as hazardous by current legislation and does not contain harmful substances in concentrations of ≥1%. It is neverthless recommended that the Safety Data Sheet be consulted on 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. Stern, Hegarty and Williams. 1942. Food Research 7:186.
2. Downes and Ito (ed.). 2001. Compendium of methods for the microbiological examination of foods, 4th ed. American Public Health Association, Washington, D.C.

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PRODUCT SPECIFICATIONS

NAME
THERMOACIDURANS AGAR

PRESENTATION
Dehydrated culture medium

STORAGE
10-30°C

PACKAGING

Code	Content	Packaging
610345	500 g	500 g of powder in plastic bottle
620345	100 g	100 g of powder in plastic bottle

pH OF THE MEDIUM
5.0 ± 0.05

USE
THERMOACIDURANS AGAR is a medium for isolating and cultivating *Bacillus coagulans* (*Bacillus thermoacidurans*) from foods.

TECHNIQUE
Refer to technical sheet of the product.

APPEARANCE of the MEDIUM
Dehydrated medium
Appearance: free-flowing, homogeneous.
Colour: light-tan.
Prepared medium
Appearance: opalescent.
Colour: light amber.

SHELFLIFE
4 years

QUALITY CONTROL
1. Control of general characteristics, label and print
2. Sterility control
   7 days at 25 ± 1°C, in aerobiosis
   7 days at 36 ± 1°C, in aerobiosis
3. Microbiological control
   Inoculum for productivity: 100-1000 UFC/ml
   Inoculate and incubate plates at 55 ± 1°C for 18-48 hours.

Microorganism	ATCC	Growth
Bacillus coagulans	7050	good

TABLE OF SYMBOLS

LOT Batch code	Do not reuse	Manufacturer	Contains sufficient for <n> tests	Temperature limitation
REF Catalogue number	Fragile, handle with care	Use by	Caution, consult accompanying documents	

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