

YSG Broth

Liquid medium for detection of *Alicyclobacillus* in fruit juices and other similar beverages or food.

TYPICAL FORMULA	(g/l)
Yeast Extract	2.0
Glucose	1.0
Soluble Starch	2.0
Final pH 3.7 ± 0.2	

DESCRIPTION

YSG Broth is a liquid medium used for the enrichment and cultivation of *Alicyclobacillus* from fruit juices and other acidic food.

PRINCIPLE

Yeast extract provides amino acids, nitrogen, carbon, minerals and vitamins. Glucose is an energy source. Soluble starch is a protective agent capable to neutralize and absorb toxic metabolites produced by bacterial growth. The low pH of the medium and the high incubation temperature act as selective agents.

TECHNIQUE

For monitoring of raw materials, heat shock is recommended to initiate spores germination. Finished products are usually heated during processing, therefore heating is not necessary for their investigation. Inoculate the medium with the diluted or undiluted sample and incubate at 45 ± 2°C for 3-5 days.

INTERPRETATION OF RESULTS

Turbidity indicates microbial growth.

STORAGE

10-25°C away from light, until the expiry date on the label. Eliminate if 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. International Federation of Fruit Juice Producers (IFU) – First standard IFU-method on the detection of *Alicyclobacillus* in fruit juices – IFU method No. 12 January 2004 / February 2006
2. Japan Fruit Juice Association (2007) The unified test method for thermo-acidophilic Bacilli.
3. Savas Bahceci K. and Acar J. (2007) Modelling the combine effects of pH, temperature and ascorbic acid concentration on the heat resistance of *Alicyclobacillus acidoterrestris*. International Journal of Food Microbiology 120:266-273
4. Witthuhn R.C., W. Duvenage, P.A. Gouws (2007) Evaluation of different growth media for the recovery of the species of *Alicyclobacillus*. Letters Appl. Microbiol. 45:224-229.



PRODUCT SPECIFICATIONS

NAME

YSG Broth

PRESENTATION

Glass bottles containing 90 ml of medium

STORAGE

10-25°C

PACKAGING

Ref.	Content	Packaging
402610	6 x 90 ml bottles	• 6 bottles in cardboard box

pH OF THE MEDIUM

3.7 ± 0.2

USE

YSG Broth is a liquid medium used for the enrichment and cultivation of *Alicyclobacillus* from fruit juices and other acidic food

TECHNIQUE

Refer to technical sheet of the product

APPEARANCE OF THE MEDIUM

Light yellow, slightly opalescent

SHELF LIFE

2 years

QUALITY CONTROL

- Control of general characteristics, label and print
- Sterility control
7 days at 22 ± 2°C, in aerobiosis
7 days at 35 ± 2°C, in aerobiosis
- Microbiological control
Inoculum for productivity: ≤100 CFU
Inoculum for selectivity: >10³ CFU
Incubation Conditions: 3-5 days at 45 ± 2°C, in aerobiosis










Microorganism

Alicyclobacillus acidocalcaris ATCC® 27009
Alicyclobacillus acidoterrestris DSM 2498
Escherichia coli ATCC® 25922

Growth

Good
Good
Inhibited

TABLE OF SYMBOLS

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



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