

K Agar

Medium used for the isolation and cultivation of *Alicyclobacillus* spp. in fruit juices.

• CONTENTS (Liter)

Peptone	8.0 g
Glucose	1.0 g
Agar	15.0 g
Final pH = 3.7 ± 0.1 at 25°C.	

• PROCEDURE

Suspend 24.0 G of powder in 1 L of distilled or deionized water. Add 1.0mL of Tween 80 supplement (MB-T1861) and heat to boiling until completely dissolved. Sterilize by autoclave at 121°C for 15 minutes. Cool to 45-50°C in water bath. Aseptically add 2 vials of K Agar supplement (MB-K3059). Mix well. Dispense in petri dishes.

K Agar supplement

1 vial content (each vial is sufficient for 500mL of medium)
L - Malic Acid 1.5 g

• INTERPRETATION

K Agar is a medium used for the isolation and cultivation of *Alicyclobacillus* spp. in fruit juices. Peptone provides essential sources of nitrogen and other growth nutrient. Glucose is a carbohydrate. Tween 80 is an additional source of growth factor and fatty acid. L-malic acid drops the pH until 3.7 ± 0.1 and inhibits other bacteria.

• TECHNIC

Inoculate the plates with spreading the specimen on surface of medium using a sterile loop. Incubate at 45 ± 1°C for 2 - 5 days. Refer appropriate references for recommended test procedure.

• QUALITY CONTROL FOR USE

Dehydrated medium

Appearance: free-flowing, homogeneous.

Color: light beige.

Prepared medium

Appearance: clear.

Color: light amber.

Incubation conditions: : 45 ± 1°C / 2 - 5 days

Microorganism	ATCC	Inoculum CFU	Growth
<i>Alicyclobacillus acidocaldarius</i>	27009	50-100	good
<i>Escherichia coli</i>	25922	≥10 ³	Inhibited
<i>Staphylococcus aureus</i>	25923	≥10 ³	inhibited

• STORE

The powder is very hygroscopic. Store the powder at room temperature, 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 medium at 2-8°C.

• REFERENCES

1. Foodborne Pathogenic Microorganisms and Natural Toxins Handbook *Bacillus cereus* and other *Bacillus* spp. (2003) U.S. Food & Drug Administration (C.F.S.A.N)
2. Handbook of Culture Media for Food Microbiology (2003) Volume 37. Chapter 4. Media for *Bacillus* spp. and related genera relevant to foods. Edited by Corry, J. E. L., Curtis, G. D. W. and Baird, R. M. Publisher – Elsevier, Amsterdam.

• PACKAGE

Cat. No : MB-K2175 K Agar	500 G
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