

# Wilkins-Chalgren Agar



Medium used for the cultivation and enumeration of anaerobic microorganisms and for the susceptibility test.

## • CONTENTS (Liter)

Pancreatic Digest of Casein	10.0 g
Pancreatic Digest of Gelatin	10.0 g
Yeast Extract	5.0 g
Glucose	1.0 g
Sodium Chloride	5.0 g
L-Arginine	1.0 g
Sodium Pyruvate	1.0 g
Hemin	0.005 g
Menadione	0.0005 g
Agar	15.0
Final pH = 7.1 ± 0.2 at 25°C	

## • PROCEDURE

Suspend 48.01 G of powder in 1 L of distilled or deionized water. Heat to boiling until completely dissolved. Sterilize by autoclave at 121°C for 15 minutes. Cool to 45 - 50°C in water bath. Mix well. Pour into petri dishes.

## • INTERPRETATION

Wilkins-Chalgren Agar is a medium used for the cultivation and enumeration of anaerobic microorganisms and for the susceptibility test. Pancreatic digest of casein, pancreatic digest of gelatin and yeast extract provide carbon, nitrogen, vitamins and minerals. Glucose and sodium pyruvate are the energy sources. Sodium chloride maintains the osmotic balance. L-arginine, hemin and menadione serve as growth factors. Agar is the solidifying agent.

## • TECHNIC

Inoculate the specimen using a sterile loop to the medium. Incubate at 35 ± 2°C for 48 - 72 hours under anaerobic condition. Refer appropriate references for recommended test procedure.

## • QUALITY CONTROL FOR USE

### Dehydrated medium

Appearance: free-flowing, homogeneous

Color: light beige

### Prepared medium

Appearance: slightly opalescent

Color: light amber

Incubation conditions: 35 ± 2°C / 48 - 72 hours under anaerobic condition

Microorganism	ATCC	Inoculum CFU	Growth
<i>Bacteroides fragilis</i>	25285	10 <sup>2</sup> -10 <sup>3</sup>	good
<i>Clostridium perfringens</i>	13124	10 <sup>2</sup> -10 <sup>3</sup>	good

## • 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. Store prepared medium at 2 - 8°C.

## • REFERENCES

1. Wilkins and Chalgren (1976) Medium for use in antibiotic susceptibility testing of anaerobic bacteria. Antimicrob. Agents Chemoter. 10: 926.
2. Isenberg, H.D. (1992) Clinical Microbiology Procedures Handbook. American Society for Microbiology, Washington, D.C.

## • PACKAGE

Cat. No : MB-W2283 Wilkins-Chalgren Agar	500 G
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