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# Wilkins Chalgren Agar

### **DM235**

#### Intended Use

A medium recommended for the culture and antibiotic susceptibility testing of anaerobes.

### **Contents**

See pack label.

#### Formulation\*

Material:	Concentration in medium:
Casein hydrolysate, Enzymic	10.0 g/litre
Pancreatic digest of gelatin	10.0 g/litre
Yeast extract	5.0 g/litre
Glucose	1.0 g/litre
Sodium chloride	5.0 g/litre
L-arginine hydrochloride	1.0 g/litre
Sodium pyruvate	1.0 g/litre
Haemin	0.005 g/litre
Menadione	0.0005 g/litre
Agar	12.0 g/litre
Final pH: $7.1 \pm 0.2$	

# Storage and shelf life

All dehydrated culture media containers should be kept tightly closed and stored in a dry place at 10 to 25°C until the expiry date shown on the pack label.

# **Precautions**

For *in vitro* diagnostic use only. Observe approved hazard precautions and aseptic techniques. To be used only by adequately trained and qualified laboratory personnel. Sterilise all biohazard waste before disposal. Refer to Product Safety Data sheet (available on request or via MAST® website).

# Materials required but not provided

Standard microbiological supplies and equipment such as loops, MAST® selective supplements, swabs, applicator sticks, incinerators and incubators, etc., as well as serological and biochemical reagents and additives such as blood.

### **Procedure**

- Refer to pack label for quantities and volumes required. Prepare MAST® Wilkins Chalgren Agar (DM235D) by suspending the powder in distilled or deionised water. For sachet packs, dissolve the entire contents of the sachet in the volume shown on the label.
- 2. Autoclave at 121°C (15 p.s.i.) for 15 minutes.
- 3. Cool to 50 to 55°C and hold at this temperature in a water bath.

- 4. If required add 5 to 7% sterile defibrinated sheep blood to enhance the growth of fastidious anaerobic species.
- 5. Antimicrobial Susceptibility Testing should be performed in accordance with standards set down by regulatory bodies such as CLSI<sup>®</sup> (Clinical and Laboratory Standards Institute).
- 6. Prepare test plates for agar dilution susceptibility testing by addition of appropriate antibiotic solutions.
- 7. Pour culture plates (20ml per 100mm diameter plate or alternative volumes according to the methodology followed) and allow to set.
- 8. Prepared culture plates should be used immediately.
- 9. Prepare a suspension of each organism equivalent in density to a 0.5 McFarland standard. Inoculate onto each test and control plate using a replicating device, e.g. the SCANURIDOT Multipoint Inoculator, to deliver 1 to 5µl of each inoculum onto the agar surface.
- 10. Incubate plates anaerobically for 48 hours at 35 to 37°C.

# Interpretation of results

After incubation record the growth end point and determine the Minimum Inhibitory Concentration (MIC) of the test organism. Interpret results as sensitive, intermediate or resistant according to the criteria laid down in the method of use.

# **Quality control**

Check for signs of deterioration. Quality control must be performed with at least one organism to demonstrate expected performance. Do not use the product if the result with the control organism is incorrect. The list below illustrates a range of performance control strains which the end user can easily obtain.

Test Organisms		
Bacteroides fragilis	Growth and correct	
ATCC® 25285	susceptibility pattern	
Bacteroides	Growth and correct	
thetaiotaomicron	susceptibility pattern	
ATCC® 29741		

### References

Bibliography available on request.