

**Technical Data Sheet** 

PRODUCT: CHOCOLATE BACITRACIN AGAR REFERENCE: 010027



Date 1st Edition: 7th 2009 Date 3rd Revision: 9th 2023

# DESCRIPTION

Chocolate Agar is an enriched substrate for the isolation and cultivation of the Haemophilus from a variety of clinical specimens.

# PRINCIPLE OF THE METHOD

The peptone mixture provides rich nutrients in the material, such as nitrogen, vitamins, carbon, trace elements, and so on. Starch provides energy and vitamins. Sodium chloride provides electrolytes and regulates the osmotic balance of the material. Agar is the coagulation agent. With the addition and processing (thermal haemolysis) of 6% of horse blood, the nutrition of the material is enhanced.

The lysis solution provides the hemin and  $\beta$ -NAD (X & V factors) essential factors for the development of microaerophilic bacteria (*Haemophilus*). The collaboration of bacitracin facilitates selective isolation of the *Haemophilus* species. Bacitracin is a polypeptide antibiotic that inhibits gram (+) bacteria and *Neisseria*.

COMPOSITION	g/litre
Columbia Peptone Mixture	23.0
Corn Starch	1.0
Sodium chloride	5.0
Agar No. 2	12.0
Bacitracine	75mg
Horse Blood	60ml

Appearance: Brown - unclear chocolate due to the addition of blood. Final pH 7.3  $\pm$  0.2 in 25  $^{\circ}\text{C}$ 

# PRECAUTIONS

CHOCOLATE BACITRACIN AGAR is an in vitro laboratory diagnostic material and should only be handled by specialist laboratory staff. This material contains peptones and animal origin extracts.

Certificates of origin and animal health status do not fully guarantee the absence of pathogens that could be contagious. It is therefore recommended that these materials be treated as potentially infectious and in compliance with the usual measures of safety (not taken by the digestive or respiratory tract).

The dishes should always be handled with gloves and in Laminar Flow Class II, to avoid contamination mainly from saprophytic fungi. If the plate is cracked or the sachet spoilt, do not use it.

Do not use the plates if they show signs of microbial contamination.

The thickness of the agar should be 4 - 5 mm and the material should be without cracks, dryness or other signs of spoilage.

After the expiration date the material is unsuitable for use.

In case of contact with the skin, wash immediately with plenty of soap and water.

Positive samples must be destroyed in accordance with the hygiene rules laid down for the handling of infectious specimens.

# STORAGE AND TRANSPORTS CONDITIONS

Petri dishes must be stored in 2-8°C in their packaging until the time of their use.

Prolonged storage at a temperature below 6 °C creates enough moisture in the material at risk of contamination.

Freezing even instantly destroys the material. Avoid overheating also.

Petri dishes must be used until the expiration date which is shown on the label.

If you open, by mistake the, the airtight pack of the Petri-dish, you can store it in the fridge for 5-7 days after sealing it with a parafilm or a small bag.

For transport, our stability studies showed that the plates may remain at 17-25°C for 3 days or at 27-40°C for 24 hours, without affecting the attribution of the product.

### USAGE

Vaccinate and disperse the sample as soon as possible after receiving it from the laboratory. Alternatively, if the specimen is to be cultured after swab, the following procedure can be followed:

1) Pass the dissecting needle holder onto the agar by scribing a large Z on its surface. This allows the dissecting needle holder to pass through the nutrient medium for a good expiration time, achieving better transfer of the micro-organisms.

2) The material is dispersed by means of a sterile loop and crosswise to the original Z. This is best done by taking a sample. If it does not, then it takes place in the lab.

3) Place the crops as soon as possible in an aerobic environment enriched with 10% CO2.

4) Place at 35-37 ° C and examine the cultures after overnight incubation, first and after approximately 48 hours in the final phase.

### **INTERPRETATION OF RESULTS**

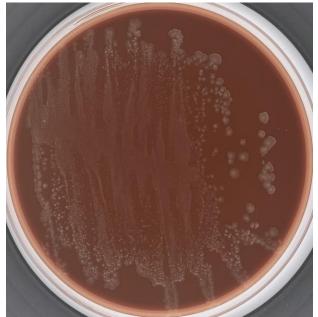
Haemophilus influenzae forms colonies of small, wet, with a slight smell. Streptococcus pneumoniae forms colonies of small, flat, green.

### LIMITATIONS OF THE METHOD

The final identification must be done by biochemical and serological tests. (e.g., a Latex Test welding test and can be run directly from suspicious colonies.

## **GENERAL CHARACTERISTICS OF QUALITY CONTROL**

Microorganism	ATCC	Colonies
Haemophilus influenzae	10211	Small, wet, with a slight smell.
Streptococcus pneumoniae	6305	Small, flat, green.
Neisseria meningitidis	13090	Partial to full suspension.
Neisseria gonorrhoeae	43069	Partial to full suspension



Haemophilus influenzae ATCC 10211

# WASTE DISPOSAL OF WASTE

Materials that do not show any growth can be considered non-hazardous waste and discarded accordingly. Plates that develop colonies must be disposed of in accordance with the instructions for contaminants or potential contaminants. The laboratory is responsible for the proper management of infectious waste in accordance with its nature and degree of risk and should handle and discard it (or assign its management and disposal) in accordance with the applicable regulations.

## SPECIFICATIONS

CHOCOLATE BACITRACIN AGAR – ᢗ 🗧						
	PRODUCT	CODE	PACKING	STORE	SELF LIFE	

Plate	010027	10 pieces	2-8 °C	3 months
90mm				

It is produced in Greece by the company Bioprepare in accordance with the requirements of the European Directive 2017/746.

BASIC UDI-DI: 5212037714010401WF. EDMA (14 01 04 01) Non-Chromogenic media (Plates).

The Bioprepare company has been certified according to the standards: EN ISO 9001:2015 / EAOT EN ISO 13485:2016 DY8d/1348/2004

#### BIBLIOGRAPHY

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#### IN VITRO MANUFACTURER'S DATA





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