**TECHNICAL DATA SHEET**

# MEAT LIVER GLUCOSE 0,6% AGAR

**CULTURE AND ISOLATION OF ANAEROBIC BACTERIA**

## 1 INTENDED USE

Meat-Liver Glucose 0.6% Agar is a medium specially designed for the growth and isolation of anaerobic bacteria growing in the depth of the medium. It can also be used to elucidate the type of bacterial respiration and is suitable for sterility tests of pharmaceutical products and canned foods.

## 2 PRINCIPLES

Meat-Liver Peptone favors the growth of most microorganisms, particularly that of anaerobic bacteria.

Glucose is the energy source for growth.

## 3 TYPICAL COMPOSITION

The composition can be adjusted in order to obtain optimal performance.

For 1 liter of media :

- Meat – liver peptone..... 30,0 g
- Glucose ..... 2,0 g
- Bacteriological agar..... 6,0 g

pH of the ready-to-used media at 25 °C : 7,3 ± 0,2.

## 4 PREPARATION

- Dissolve 38,0 g of dehydrated media (BK024) in 1 liter of distilled or demineralized water.
- Slowly bring to boiling, stirring with constant agitation until complete dissolution.
- Dispense
  - in tubes 9 x 180 mm for detection of type of respiration and isolation in depth.
  - in tubes 20 x 200 mm for sterility control.
- Sterilize in an autoclave at 121°C for 15 minutes.
- Cool and maintain the media in a molten state at 44-47 °C.

✓ **Reconstitution : 38,0 g/L**

✓ **Sterilization : 15 min at 121 °C**

## 5 INSTRUCTIONS FOR USE

**Respiration determination :**

- Immerse the tapered tip of a Pasteur pipette in the culture to examine.
- Plunge the inoculum to the bottom of the tube.
- Raise the tip to the surface in a spiral movement.
- Cool in an ice bath.
- Incubate at the optimal growth temperature of the strain in question.

✓ **Inoculation: Into agar tubes**

**Isolation of anaerobic bacteria:**

- Transport the inoculum successively in several tubes of medium (as above) until exhaustion
- Cool in an ice-water bath.
- Incubate at the desired temperature.
- Isolated colonies appear in the last tubes of the series.

**Sterility tests :**

- Transfer the inoculum to the medium.
- Cool in an ice bath.

Incubate for 10 days at 30 °C for mesophilic microorganisms or at 55°C for resuscitatable thermophilic microorgansims.

## 6 RESULTS

**THE TYPE OF CULTURE ZONE DEFINES THE RESPIRATION** :
- Growth in the upper zone : obligate aerobes.
- Growth in the deep zone : obligate anaerobes
- Growth throughout the height of the tube : facultative anaerobes.
- Growth as a ring in the intermediate zone : microaerophilic bacteria.

## 7 QUALITY CONTROL

**Dehydrated media** : beige powder, free-flowing and homogeneous.
**Prepared media** : amber, semi-solid agar.

Typical culture response after 18 hours of incubation at 37 °C :

| Microorganisms | | Growth |
|---|---|---|
| *Clostridium perfringens* | WDCM 00007 | Good, score 2 |
| *Clostridium perfringens* | WDCM 00080 | Good, score 2 |

## 8 STORAGE / SHELF LIFE

**Dehydrated media :** 2-30 °C.
The expiration date is indicated on the label.

**Prepared media in tubes (*) :** 180 days at 2-8 °C.
Regenerate at 100 °C for 20 minutes before inoculation. Do not do this more than one time.
(*) Benchmark value determined under standard preparation conditions, following manufacturer's instructions.

## 9 PACKAGING

**Dehydrated media :**
500 g bottle ..... BK024HA

## 10 ADDITIONAL INFORMATION

The information provided on the labels take precedence over the formulations or instructions described in this document and are susceptible to modification at any time, without warning.

Document code : MEAT LIVER GLUCOSE_ENv6
Creation date : 04-2001
Updated : 06-2016
Origin of revision : General update.