

# TECHNICAL DATA SHEET

## OF GLUCOSE AGAR

### CONFIRMATION OF ENTEROBACTERIACEAE

#### 1 INTENDED USE

The OF Glucose agar allows the demonstration of glucose fermentation as an identification test for *Enterobacteriaceae* in the context of the following standards : NF EN ISO 21528-1 and NF EN ISO 21528-2 for the detection and enumeration of *Enterobacteriaceae*.

#### 2 PRINCIPLES

The nutritive qualities of the medium are due to its content of casein peptone, yeast extract and glucose. Fermentation of glucose is demonstrated through acidification, which turns the pH indicator (bromthymol blue) yellow. Sodium chloride helps to maintain osmotic equilibrium.

#### 3 TYPICAL COMPOSITION

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

For 1 liter of media :

- Enzymatic digest of casein.....	2,0 g
- Dipotassium hydrogen phosphate (K <sub>2</sub> HPO <sub>4</sub> ).....	0,3 g
- Glucose .....	10,0 g
- Sodium chloride .....	5,0 g
- Bromthymol blue .....	80,0 mg
- Bacteriological agar.....	4,0 g

pH of the ready-to-use media at 25 °C : 6,8 ± 0,2.

#### 4 INSTRUCTIONS FOR USE

- Before use, heat the tubes in boiling water or under steam flow for 15 minutes.
- Cool to temperature of incubation.
- From a suspect colony taken from a selective isolation media and purified on Nutrient agar, inoculate the butt of the tube by stabbing in the center of the tube. Overlay the surface of the medium with minimal 1 cm of sterile mineral oil.
- Incubate at 37°C for 24 hours.

✓ **Inoculation :**  
**Central stab**

✓ **Incubation :**  
**24 h at 37 °C**

#### Note :

It is required to use pure cultures taken from isolated, distinct colonies in order to avoid cross reactions that render identification impossible.

#### 5 RESULTS

If a yellow colour develops throughout the content of the tube, regard the reaction as being positive.

## 6 QUALITY CONTROL

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**Aspect, color :** Green agar.

Typical culture response after 24 hours of incubation at 37 °C :

Microorganisms		Growth	Glucose fermentation
<i>Escherichia coli</i>	WDCM 00013	Good, score 2	Positive
<i>Salmonella Typhimurium</i>	WDCM 00031	Good, score 2	Positive
<i>Pseudomonas aeruginosa</i>	WDCM 00025	Inhibited	Negative

## 7 STORAGE / SHELF LIFE

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**Ready-to-melt media in tubes :** 2-8 °C.

The expiration date is indicated on the label.

## 8 PACKAGING

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**Ready-to-melt media :**

50 x 10 mL tubes ..... BM19708

## 9 BIBLIOGRAPHY

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NF EN ISO 11133. Juillet 2014. Microbiologie des aliments, des aliments pour animaux et de l'eau - Préparation, production, stockage et essais de performance des milieux de culture (Tirage 2 (2016-01-01)).

NF EN ISO 21528-1. Juillet 2017. Microbiologie de la chaîne alimentaire - Méthode horizontale par la recherche et le dénombrement des Enterobacteriaceae - Partie 1 : recherche des Enterobacteriaceae.

NF EN ISO 21528-2. Juillet 2017. Microbiologie de la chaîne alimentaire - Méthode horizontale pour la recherche et le dénombrement des Enterobacteriaceae - Partie 2 : technique par comptage des colonies.

## 10 ADDITIONAL INFORMATION

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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.

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