

GLUTAMATE BROTH BASE, MODIFIED

A synthetic differential medium for the enumeration of coliforms in water according to ISO 16649.

Dehydrated media	
Code number:	500 g: MMG20500, 5 kg: MMG25000
Colour:	Beige
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving (25 °C):	6,5 – 6,9

Direction: Dissolve **2,5 g of ammonium chloride** and **6,35 g of sodium glutamate** in one litre of distilled water. Add **11,4 g** of dehydrated medium and heat gently to dissolve the medium completely. Dispense into test tubes fitted with Durham tube and sterilise by autoclaving at 115 °C for 10 minutes. Cool quickly!

Warning!

The medium is heat sensitive. No further sterilisation is necessary or desirable.

Prepared media	
Bottled media:	100 ml: MMG30100, 500 ml: MMG30500
Tubed media:	150 x 15 mm: MMG40010 (10 ml)
Colour:	Purple
pH (25 °C):	6,6 – 6,8

Direction: Dispense the bottled media aseptically into sterile test tubes fitted with Durham tube. Media in tubes are ready to use.

FORMULA in g/l

Lactose	10,000
L-Aspartic acid	0,024
L-Arginine	0,020
L-Cystine	0,020
Sodium formate	0,250
Magnesium sulphate x 7 H ₂ O	0,100
Ammonium iron(III) citrate	0,010
Calcium chloride x 2 H ₂ O	0,010
Nicotinic acid	0,001
Pantothenic acid	0,001
Thiamine hydrochloride	0,001
Bromocresol purple	0,010
Potassium-phosphate, dibasic	0,950

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature. Store the bottled and tubed media protected from light at 2 – 8 °C. Use before the expiry date on the label.

Quality control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Escherichia coli</i>	ATCC 25922	Good, with gas production, colour change to yellow	
<i>Salmonella typhimurium</i>	ATCC 14028	Good, without gas production and colour change	

References: PHLS (1968) J. Hyg. Camb. 66: 67-82.
ISO 16649-1:2018, ISO 16649-3:2015

In vitro diagnostic – for professional use only!