

Product Data Sheet

BOLTON BROTH BASE (ISO 10272-1:2017)

Product No. GB-DCM-00103-1A

INTENDED USE

For selective enrichment of *Campylobacter* species from foods.

Product Specifications

Ingredients	Gms / Ltr
Peptic digest of animal tissue	10.000
Lactalbumin hydrolysate	5.000
Yeast extract	5.000
Sodium chloride	5.000
alpha-ketoglutaric Acid	1.000
Sodium carbonate	0.600
Sodium metabisulphite	0.500
Sodium pyruvate	0.500
Hemin	0.010

PRINCIPLE

Enzymatic digest of animal tissues, Lactalbumin hydrolysates and yeast extract provide essential growth nutrients like vitamin, amino acids and other nitrogenous compounds to *Campylobacter* species. The addition of sodium metabisulphite and sodium pyruvate quenches toxic compounds and increases on this way the recovery rate and also the aero-tolerance of the culture. The alpha-ketoglutaric acid is used for an initial burst of the metabolism. Sodium carbonate is added to neutralize the acid that may form in the culture medium. The osmotic balance is given by the sodium chloride. The antibiotics Vancomycin, Cefopeerazone and Trimethoprim present in the supplement inhibit the growth of gram positive and gram negative bacteria. Amphotericin B, as well in the supplement, largely reduces the growth of yeasts and molds.



INSTRUCTION FOR USE

- Dissolve 27.6 grams in 1000ml distilled water.
- Gently heat to boiling with swirling to dissolve the medium completely.
- Sterilize by autoclaving at 15 psi (121oC) for 15 minutes.
- Cool at 45 – 50°C
- Aseptically add 50 ml Lysed Horse Blood and 2 vials of Bolton selective supplement (TS 179)
- Mix well and aseptically dispense into sterile tubes.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder: Light yellow to yellow with green tinge homogeneous free flowing powder
 Appearance of prepared medium: Bluish green coloured clear to slightly opalescent gel forms in tubes as butts.

pH (at 25°C) : 7.4±0.2

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery
Escherichia coli	33559	50-100	Good-luxuriant	>=50%
Campylobacter jejuni	29428	50-100	Good-luxuriant	>=50%
Candida albicans	10231	≥1000	Good-luxuriant	0%
Escherichia coli	25922	≥1000	Good-luxuriant	0%

STORAGE

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 25-30°C and protect from direct sunlight. Under optimal conditions, the medium has a shelf life of 4 years. When the container is opened for the first time, note the time and date on the label space provided on the container. After the desired amount of medium has been taken out replace the cap tightly to protect from hydration.

Product Deterioration: Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

DISPOSAL

After use, prepared plates, specimen/sample containers and other contaminated materials must be sterilized before discarding.

This product is for research use only.