B1320	BOLTON BROTH BASE

Formula

Ingredients :	**gms/lit.**
Enzymatic digest of animal tissues	10.00
Lactalbumin hydrolysate	5.00
Yeast extract	5.00
Sodium chloride	5.00
Sodium metabisulphite	0.50
Sodium carbonate	0.60
Hemin	0.01
alpha-ketoglutaric Acid	1.00
Sodium pyruvate	0.50

Final pH (at 25°C) : 7. 4 ± 0.2

Directions :

Suspend 13.8 grams in 500 ml distilled water. Heat if necessary to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Cool to 50°C and aseptically add rehydrated contents of 1 vial of Bolton Selective supplement (BF158) and 25 ml of sterile lysed defibrinated horse blood in the medium. Horse blood may be saponin lysed or lysed by freezing then thawing out. Mix well and aseptically dispense into sterile tubes.

Principle :

The media is made selective for Campylobacters by addition of the antibiotics cefoperazone, vancomycin, trimethoprim and amphotericin B. These antibiotics are added as supplements. The medium contains nutrients, which aid resuscitation of sub lethally damaged cells of Campylobacter. Hence microaerophilic incubation is not needed. The supplement added to the medium contains four different antibiotics. Vancomycin, cefoperazone and trimethoprim inhibit the growth of gram-positive and gram-negative bacteria while amphotericin B largely reduces the growth of yeasts and molds.

QC Tests – (I)Dehydrated Medium		
	Colour :	Light yellow to brownish yellow
	Appearance :	Homogeneous Free Flowing powder
(II)Rehydrated medium		
	pH (post autoclaving/heating) :	7.4 ± 0.2
	Colour (post autoclaving/heating) :	Light yellow to brownish yellow
	Clarity (post autoclaving/heating) :	Basal medium: Brownish yellow coloured clear to slightly opalescent solution. After addition of lysed horse blood: Red to brown coloured opaque solution in tubes.
(III)Q.C. Test Microbiological		
	Cultural characteristics observed with added Bolton Selective Supplement (BF158) after an incubation at 35-37°C for 4-6 hours and then at 41.5°C for 40-48 hours.	

	MICROORGANISM (ATCC)	GROWTH		
	Candida albicans (10231)	Inhibited		
	Campylobacter coli (33559)	good-luxuriant		
	Campylobacter jejuni (29428)	good-luxuriant		
	Escherichia coli (25922)	Inhibited		

Precautions :	1. For Laboratory Use.
	2. Follow proper, established laboratory procedures in handling and disposing of infectious materials.
Limitations :	1. Since the nutritional requirements of organisms vary, some strains may be encountered that fail to grow or grow poorly on this medium.
Use :	It is used for the selective enrichment of Campylobacter species from foods. Recommended by International Organization for Standardization (ISO), 2006, Draft ISO 10272- 1:2006 (E)
Storage :	Dehydrated medium- below 30° C Prepared medium– Between 2 to 8°C.
Packing :	500 gm. bottle

Product profile:	Reconstitution	Quantity on Preparation (500g)	pH (25°C)	Supplement	Sterilization
B1320	27.6 g/l	18.115L	7.4 ± 0.2	Bolten Broth selective supplement (BF158).	121^0C / 15 minutes