

# **GIOLITTI-CANTONI BROTH BASE**

Basal medium for *Staphylococcus aureus* enrichment from foods, recommended by ISO 6888-3: 2003.

TYPICAL FORMULA	(g/l)	
Tryptone	10.0	
Beef Extract	5.0	
Yeast Extract	5.0	
	20.0	
D-Mannitol		
Lithium Chloride	5.0	
Sodium Chloride	5.0	
Glycine	1.2	
Sodium Pyruvate	3.0	
Final pH = $6.9 \pm 0.2$ at 25 °C.		

### DIRECTIONS

Suspend 54.2 g of powder in 1 liter of distilled or deionized water. Heat gently and shake until completely dissolved. Distribute into tubes in amounts of 19 ml. Sterilize in autoclave at 121 °C for 15 minutes. Cool to 45-50 °C. Aseptically add 0.3 ml of Potassium Tellurite 3.5% supplement (code 80291) to each tube or 0.03 ml when testing meat products or quality control organisms. Mix well.

#### DESCRIPTION

GIOLITTI-CANTONI BROTH BASE is used with Potassium Tellurite 3.5% supplement in enriching *Staphylococcus aureus* from foods during isolation procedures, as recommended by ISO 6888-3: 2003.

#### TECHNIQUE

Inoculate 1 g or 1 ml of test sample (0.1 g or 0.1 ml when testing meat or meat products) and 1 ml of each of a suitable decimal dilution series of the test sample into duplicate tubes.

Overlay each tube with 5 ml of sterile molten paraffin wax to an approximate height of 2 cm. Incubate at  $36 \pm 1$  °C for 40-48 hours. Examine daily. Read tubes for blackening of the medium (a positive reaction) or no blackening (a negative reaction). If blackening occurs subculture on Baird Parker Agar, it confirms the isolation of *S. aureus*.

### QUALITY CONTROL

<u>Dehydrated medium</u> Appearance: free-flowing, homogeneous. Color: tan. <u>Prepared medium</u> Appearance: clear without significant precipitate. Color: medium amber. Incubation conditions:  $36 \pm 1$  °C for 40-48 hours.

Microorganism	ATCC	Growth	Characteristics
Escherichia coli	25922	inhibited	no blackening
Micrococcus luteus	10240	inhibited	no blackening
Staphylococcus aureus	25923	good	blackening
Staphylococcus aureus	6538	good	blackening



### LIOFILCHEM s.r.l.

Via Scozia, Zona Ind.le - 64026, Roseto D.A. (TE) - ITALY Phone +390858930745 Fax +390858930330 Website: www.liofilchem.net E-mail: liofilchem@liofilchem.net



## STORAGE

The powder is very hygroscopic: store the powder at 10-30 °C, in a dry environment, in its original container tightly closed and use it before the expiry date on the label or until signs of deterioration or contamination are evident. Store prepared tubes at 2-8 °C.

### REFERENCES

1. Giolitti, G., and C. Cantoni. (1996). A medium for the isolation of staphylococci from foodstuffs. J. Appl. Bacteriol. **29**: 395-398.

2. International Dairy Federation. (1978). IDF Standard 60A.

3. ISO 6888-3: 2003. Microbiology of food and animal feeding stuffs- Horizontal medium for the enumeration of coagulase – positive staphylococci (*Staphylococcus aureus* and other species).

#### PRESENTATION

Product	REF	Σ
GIOLITTI CANTONI BROTH BASE (9.2 I)	610100	500 g
GIOLITTI CANTONI BROTH BASE (1.8 I)	620163	100 g
POTASSIUM TELLURITE 3.5% supplement	80291	5 x 10 ml

### TABLE OF SYMBOLS



