

# Giolitti Cantoni Broth



Medium used for the isolation and cultivation of *Staphylococcus aureus*.

## • CONTENTS (Liter)

Tryptone	10.0 g
Beef Extract	5.0 g
Yeast Extract	5.0 g
D-Mannitol	20.0 g
Lithium Chloride	5.0 g
Sodium Chloride	5.0 g
Glycine	1.2 g
Sodium Pyruvate	3.0 g
Polysorbate 80	1.0 g
Final pH = 6.9 ± 0.2 at 25°C	

## • PROCEDURE

Suspend 55.2 G of powder in 1 L of distilled or deionized water. Pour into tubes in amounts of 19 mL. Sterilize by autoclave at 121°C for 15 minutes. Cool to 15 - 30°C in water bath. Aseptically add 1.05 mL of Potassium Tellurite 1% supplement (MB-P1842) to each tube or add 0.105 mL for test of meat products and quality control organisms. Mix well.

### Potassium Tellurite 1% supplement

1 vial contents	
Potassium Tellurite	0.1 g

## • INTERPRETATION

Giolitti Cantoni Broth is a medium used for the isolation and cultivation of *Staphylococcus aureus*. Tryptone, beef extract and yeast extract provide nitrogen, carbon, vitamins and minerals. Mannitol is the carbohydrate and the energy source. Lithium chloride is the selective agent. Sodium chloride maintains the osmotic balance. Glycine, sodium pyruvate and polysorbate 80 are stimulating the growth of microorganisms.

## • TECHNIC

Inoculate 1 G or 1 mL of test sample (0.1 G or 0.1 mL when testing meat or meat products). Overlay each tube with sterile molten paraffin wax to an approximate height of 2 cm. Incubate at 36 ± 1°C for 40 - 48 hours and examine daily. If blackening occurs, subculture on Baird Parker Agar (MB-B1004), which confirms the isolation of *Staphylococcus aureus*. Refer appropriate references for recommended test procedure.

## • QUALITY CONTROL FOR USE

### Dehydrated medium

Appearance: free-flowing, homogeneous

Color: beige

### Prepared medium

Appearance: clear to slightly opalescent

Color: amber

Incubation conditions: 36 ± 1 °C / 40 - 48 hours

Microorganism	ATCC	Inoculate CFU	Growth	Characteristics
<i>Staphylococcus aureus</i>	25923	50-100	good	blackening
<i>Staphylococcus aureus</i>	6538	50-100	good	blackening
<i>Micrococcus luteus</i>	10240	≥10 <sup>3</sup>	inhibited	-
<i>Escherichia coli</i>	25922	≥10 <sup>3</sup>	Inhibited	-

## • STORE

The powder is very hygroscopic. Store the powder at room temperature, in a dry environment, in its original container tightly closed and use it before the expiry date on the label. Store prepared medium 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).

## • PACKAGE

Cat. No : MB-G1100 Giolitti Cantoni Broth	500 G
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