



Giolitti-Cantoni Broth Base | AS-1238

For enriching *Staphylococcus aureus* from meals during isolation procedures.

Giolitti-Cantoni A selective enrichment medium, created especially to identify *Staphylococcus aureus* in food materials. It has a nutrient-rich basis of peptone, yeast extract, beef extract, mannitol, and sodium pyruvate to stimulate staphylococcal growth. It is recommended by authoritative authorities like the ISO, APHA, and IDF. Lithium chloride, which inhibits Gram-negative bacteria, and potassium tellurite and glycine, which suppress Gram-positive bacteria, are thought to be responsible for the medium's selective qualities. To prevent micrococcal growth, sterile paraffin wax is used, which produces anaerobic conditions. The medium turning black suggests possible *Staphylococcus aureus* infection. The purpose of this broth is to qualitatively identify the presence of low *staphylococci* in food samples.

Composition (gr/L)

Tryptone	10
Beef Extract	5
Yeast Extract	5
D-Mannitol	20
Sodium Chloride	5
Lithium Chloride	5
Sodium Pyruvate	3
Tween 80	1
Final pH at 25°C	6.9 ± 0.2

Preparation

Dissolve 55.2 g of the powder into 1 liter distilled water. Pour 19 ml of the medium to 20*200 test tubes. Autoclave at 121 °C for 15 minutes. Allow to cool to 15 to 30 °C. Under Aseptic condition add 1.05 ml of Tellurite solution 1% to each tube. Note when you are testing meat products or quality control organism add 0.105 ml per tube.

Quality Control

Dehydrated Appearance: Tan, free-flowing, homogeneous.

Prepared Appearance: Medium amber, clear.

Reaction of 5.52% Solution at 25°C: pH 6.9 ± 0.2

Microbial Test Results

Incubate at 35±2 °C for 24 to 48 hours.

Organism (ATCC)	Recovery	Appearance
<i>Escherichia coli</i> (25923)	Inhibition	No Blackening
<i>Staphylococcus aureus</i> (6538)	Good	Black
<i>Staphylococcus aureus</i> (25923)	Good	Black

Storage

Keep the container at 15-30 °C and prepared medium at 2-8 °C.