

# GIOLITTI CANTONI BROTH (5 ML)

**INTENDED USE:**

Giolitti Cantoni Broth Base with addition of potassium tellurite is used for selective enrichment of *Staphylococcus aureus* from suspected food stuffs, in accordance with ISO.

**PRINCIPLE AND INTERPRETATION:**

Mannitol and sodium pyruvate present in the basal medium act as growth stimulants for *Staphylococcus aureus*, aiding in detection of small number of organisms. Lithium chloride inhibits gram-negative lactose fermenting bacilli. Potassium tellurite and glycine inhibit gram-positive bacilli. Addition of sterile paraffin wax to the inoculated medium inhibits Micrococci due to creation of anaerobic conditions. Potassium tellurite concentration must be reduced as per the weight of test sample (0.1- 0.01 gram). The medium should be inoculated as soon as it has been cooled after sterilization, otherwise absorbed oxygen should be expelled by placing the tubes in free-flowing steam for 15-20 minutes.

**COMPOSITION:**

| Ingredients                | Gr/Liter |
|----------------------------|----------|
| Casein enzymic hydrolysate | 10 gr    |
| Meat extract               | 5 gr     |
| Yeast extract              | 5 gr     |
| Mannitol                   | 20 gr    |
| Sodium chloride            | 5 gr     |
| Lithium chloride           | 5 gr     |
| Glycine                    | 1,2 gr   |
| Sodium pyruvate            | 3 gr     |
| Tween 80                   | 1 gr     |

\*\*\*Formula adjusted, standardized to suit performance parameters

pH: 6,9 ± 0,2

**PRECAUTIONS:**

For professional use only. Do not use tubes if they show evidence of microbial contamination, discoloration or other signs of deterioration.

**TEST PROCEDURE:**

Incubation at a temperature of 35±2°C and observed after 24-48 hours.

**QUALITY CONTROL:****1.Sterility Control:**

Incubation 48 hours at 30-35°C and 72 hours at 20-25°C: NO GROWTH

**2.Physical/Chemical Control**

pH: 6,9 ± 0,2

**Apperance:** Medium amber coloured.

**3.Microbiological Control:** Incubation at a temperature of 35±2°C and observed after 24-48 hours.

| Microorganism                           | Inoculum (CFU) | Results |                                   |
|---|----------------|---------|-----------------------------------|
|   |                | Growth  | Tellurite reaction                |
| <i>Staphylococcus aureus</i> ATCC 25923 | 10-100         | Good    | Negative                          |
| <i>Escherichia coli</i> ATCC 25922      | 100-1000       | Good    | Positive,blackening of the medium |

**STORAGE CONDITIONS AND SHELF LIFE:**

Store the prepared medium at 2- 12°C. Use before expiry date on the label.Do not use beyond stated expiry date.

## DISPOSAL:

Incubated medium may contain active bacteria and micro-organisms. Do not open infected medium. Infected tube should be autoclaved, incinerated or opened and soaked in a chlorine-based disinfectant (liquid bleach) for 20 minutes prior to disposal.

## PACKAGING:

**Katalog Number:** 01005

**Content/Packaging:** 50 Tubes/Box

## REFERENCES:

- 1.Giolitti C. and Cantoni C., 1966, J. Appl. Bact., 29:395.
- 2.Mossel D.A.A.,Harrewijn G.A. and Elzebroek J.M., 1973, UNICEF.
- 3.International Organization for Standardization (ISO), 2003, Draft ISO 6888-3:2003(E).
- 4.Baird-Parker, A.C.,1962, J.Appl.Bact.,25:12.
- 5.Lambin S. and German A., 1961, 'Precis de Microbiologie', pg. 63, Paris Masson.
- 6.De Waart J., Mossel D.A.A., Ten Broeke R. and Van de Moosdijk A.,1968, J.Appl,Bact. 31:276.



Aseptic Sterile



Batch Code



Catalogue Number



Negative Controls



Positive Controls



Use by



Temperature  
Limitation



Do not reuse



Contains sufficient  
for <n> tests



Look at user manual



Manufacturer