

2,3,5 Triphenyl Tetrazolium chloride (TTC) Supplement (iS47082)

2,3,5 Triphenyl Tetrazolium chloride (TTC) supplement recommended for selective enumeration and identification of *coliform* organisms.

Industry: Water / Dairy Products

Description

TTC is a recommended supplement for selectively enumerating and identifying *coliform* organisms. This dye is commonly employed for presumptive detection, isolation, and enumeration of microbial colonies, especially *Escherichia coli* and other *coliforms*, in solid culture media using the membrane filtration technique for assessing water quality. TTC is highly advisable for milk testing, particularly in detecting microorganisms that cannot reduce TTC in pasteurized milk, eluding standard laboratory procedures.

In its oxidized state, TTC is colorless, but it turns red when reduced by live microorganisms, producing formazan, an insoluble red pigment contained within cellular granules. While TTC has minimal inhibitory effects on the growth of Gram-positive organisms, its concentration plays a role in this aspect.

Content per Vial

1 Vial for 500 ml of culture medium.

2,3,5 Triphenyl Tetrazolium chloride (TTC) 12.5 mg

Directions

Heat the supplement to room temperature. Rehydrate the contents of one vial with 5 ml of sterile distilled water and ensure thorough mixing. Aseptically incorporate it into 495 ml of sterile, molten, cooled (45-50°C) Lactose TTC Agar with Tergitol 7. Ensure proper mixing and dispense into sterile tubes or petri dishes.

Storage

Store in a light-protected environment at 2-8°C.