

Revisions

SO 0046-2

Rev From	Rev To	ECO #	Date	Appr.
1099	0803	2144-03		

Notes:

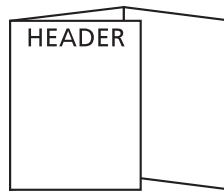
- BD Cat. No. 231121
- Blank (Sheet) Size : Length: 5.25 Width: 2.875
 Number of Pages: 2 Number of Sheets: 1
 Page Size: Length 5.25" Width 2.875" Final Folded Size: 2.625 x 2.875
- Style (see illustrations below): #1



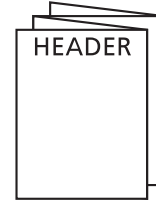
#1



#2



#3

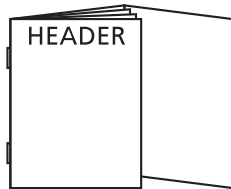


#4

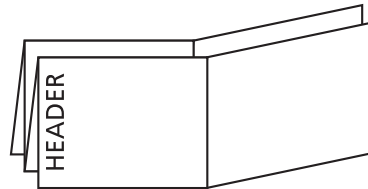
#5




#6



#7



- See Specification Control No. n/a for Material Information
- Ink Colors: Printed two sides Yes No
 No. of Colors: 1 PMS# 2755
- Graphics are approved by Becton, Dickinson and Company. Supplier has the responsibility for using the most current approved revision level.

Label Design	Date	COMPANY CONFIDENTIAL. THIS DOCUMENT IS THE PROPERTY OF BECTON, DICKINSON AND COMPANY AND IS NOT TO BE USED OUTSIDE THE COMPANY WITHOUT WRITTEN PERMISSION	 Becton, Dickinson and Company 250 Schilling Circle Cockeysville, MD. 21030-0243 USA	
Proofer	Date			
Checked By	Date			
Part Number: S1263JAA		Category and Description Package Insert TTC Solution 1%	Sheet: 1 of <hr/> Scale: 1:1	A

BD Difco™ TTC Solution 1%

S1263JAA
2003/08

INTENDED USE

TTC Solution 1% (Triphenyltetrazolium Chloride) is ready for use in the preparation of culture media.

SUMMARY AND EXPLANATION

TTC Solution 1% is prepared from microbiologically tested 2, 3, 5 triphenyltetrazolium chloride (TTC) for use in all microbiological methods utilizing triphenyltetrazolium chloride. It is used as a redox indicator in culture media for differentiating bacteria.

Chapman¹ reported that the addition of TTC to Tergitol™ 7 Agar permitted the detection and confirmation of *E. coli* after only 10 h incubation. Chapman also reported that Tergitol 7 Agar with added TTC gave a selective medium for the detection and isolation of *Candida albicans*. Chapman² added TTC, Tergitol 7 and Brom Cresol Purple to Sabouraud Maltose Agar for the isolation and identification of *C. albicans* and other fungi. Pagano, Levin and Trejo³ incorporated TTC in Pagano Levin Base for the detection and isolation of *Candida* species.

Slanetz and Bartley⁴ used TTC in m-Enterococcus Agar for the enumeration of enterococci. On this medium the colonies appear as pink to dark maroon in color. Kenner, Clark and Kabler⁵ used TTC with KF Streptococcus Agar and Broth to detect and enumerate streptococci in surface waters.

PRINCIPLES OF THE PROCEDURE

TTC Solution 1% is used as a redox indicator in culture media for differentiating bacteria. It is colorless in the oxidized form and is reduced to insoluble red triphenylformazan by suitable bacterial reducing systems. The formation of the insoluble formazan is an irreversible reaction. Once a microorganism reduces the indicator the red color persists.

REAGENTS

Approximate Formula Per 100 mL Purified Water
2, 3, 5-Triphenyltetrazolium Chloride 1.0 g

Precautions: For Laboratory Use

Storage Instructions: On receipt, store tubes in the dark at 2 – 8°C.

Product Deterioration: Do not use if tubes show evidence of contamination, discoloration, or other signs of deterioration.

PROCEDURE

TTC Solution 1% is generally used in a concentration of 0.01 g per 100 mL of broth or agar medium. This concentration is achieved by adding 1 mL TTC Solution 1% to 100 mL sterile medium cooled to 50 – 60°C.

AVAILABILITY

Cat. No. Description

231121	Difco [™] TTC Solution 1%, 30 mL.
220110	Difco [™] Brom Cresol Purple, 5 g.
274620	Difco [™] m-Enterococcus Agar, 500 g.
249610	Difco [™] KF Streptococcus Agar, 500 g.
212226	Difco [™] KF Streptococcus Broth, 500 g.
214110	Difco [™] Pagano Levin Base, 500 g.
211020	Difco [™] Sabouraud Maltose Agar, 500 g.
242910	Difco [™] Sabouraud Maltose Agar, 2 kg.

REFERENCES

1. Am. J. Pub. Hlth., 41: 1381. 1951.
2. Tran. N.Y. Acad. Sci. Series II. 74: 254. 1952.
3. Antibodies Annual, p. 137. 1957 - 1958.
4. J. Bact. 74: 591. 1957.
5. Appl. Microbiol. 9: 15. 1961.



Becton, Dickinson and Company
7 Loveton Circle
Sparks, Maryland 21152 USA
800-638-8663

Tergitol is a trademark of Union Carbide Company.

Difco is a trademark of Difco Laboratories, a subsidiary of Becton, Dickinson and Company.

BD and BD Logo are trademarks of Becton, Dickinson and Company. © 2003 BD