

# Compact Dry “Nissui” TC For Total Viable Count



- ▶ **Most colonies grown on the TC are red.**
- ▶ **Count all colonies grown on the TC.**
- ▶ **Incubate for 48 hours at 35°C.**

**Main Component** : Non-selective medium and redox indicator of TTC  
(2,3,5-Triphenyl Tetrazolium Chloride)

**Certificates** : AOAC (PTM), MicroVal

**Storage** : Keep at room temperature (1°C-30°C)

**Shelf life** : 18 months after manufacturing

**Package** : Compact Dry “Nissui” TC 40 plates (Code: 06740)

: Compact Dry “Nissui” TC 240 plates (Code: 06741)

- Compact Dry is manufactured based on Nissui’s original patented technology. -



**NISSUI PHARMACEUTICAL CO., LTD.**



Open an aluminum pouch.



Take out a set of 4 plates.

( Or take 1 - 3 plates you need and keep the pouch sealed to avoid a quality loss from light and moisture. )



Write appropriate information on a memorandum section.

## Dilution Water Preparation (Butterfield's phosphate-buffered diluent)

34 g of  $\text{KH}_2\text{PO}_4$  and 500 ml of distilled water. Adjust pH to 7.2 with 1 N NaOH. Autoclave 15 min at 121 °C.

## 1:10 Dilution Preparation



Analyze 50 g from each sub-sample.

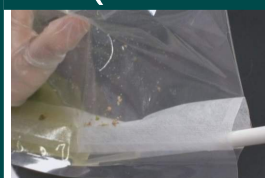


Add 450 ml of Butterfield's phosphate-buffered diluent.

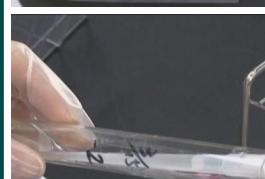


Homogenize in a stomacher for 2 min.  
→1:10 Dilution

## Further Dilutions (if necessary) (1:100 Dilution Preparation)



Take 1 ml of the 1:10 dilution.



Add it to 9 ml of Butterfield's phosphate-buffered diluent.



Mix well.  
→1:100 Dilution  
(Not more than 15 min should elapse.)





Pipette 1 ml of a sample.



Take off a lid of a plate.



Inoculate the 1 ml sample to the middle of a dry sheet.



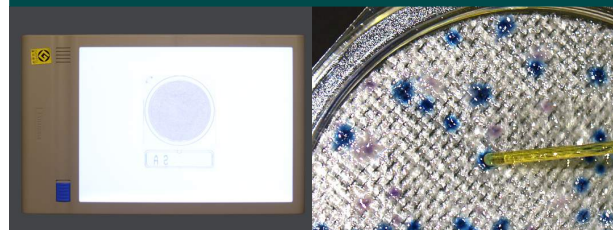
Put the lid again.

## Incubation



Turn over the plate lidded, put them in an incubator. Incubate 48 hours at 35 °C for Compact Dry TC.

## Interpretation & Colony Fishing



From the backside of the plate, count the number of colored colonies appeared in the medium. Lighting and using a loupe are useful to count colonies easier.

### Preliminary Advice

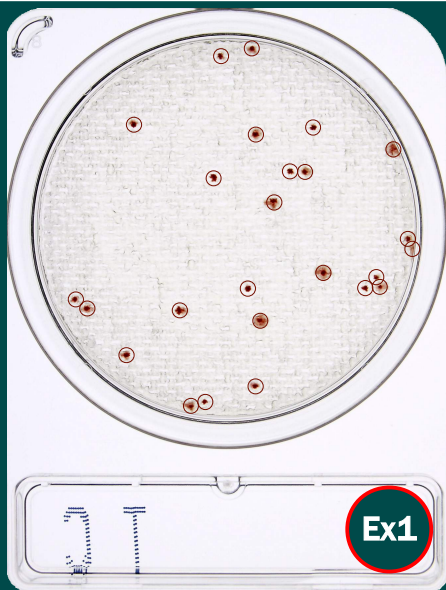
For user's convenience, "Sample Preparation" section on the page 2 of this user's manual is made with reference to FDA's BAM (Bacteriological Analytical Manual). Depending on user's needs, other official methods can be also used.

# Counting Examples & Precautions

(Print this page without margins using A4 ( 210 x 297 mm ) paper, the pictures are printed out as the same as the actual Compact Dry ( 77 x 58 ( x 7 ) mm ).



Ex1



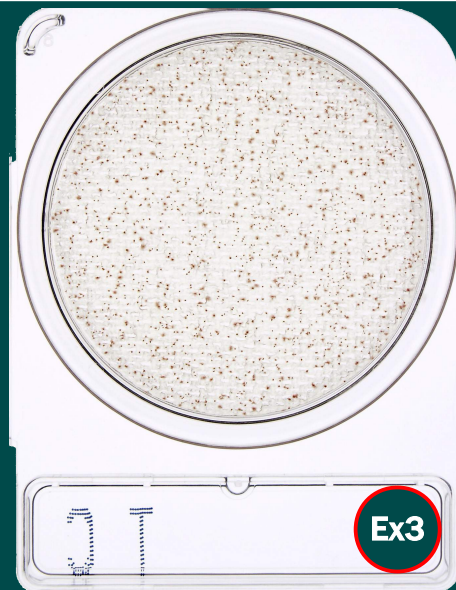
Ex1

○: Viable Count = 25 colonies



Ex1

Ex Lighting from the back  
Ex Lighting from the front

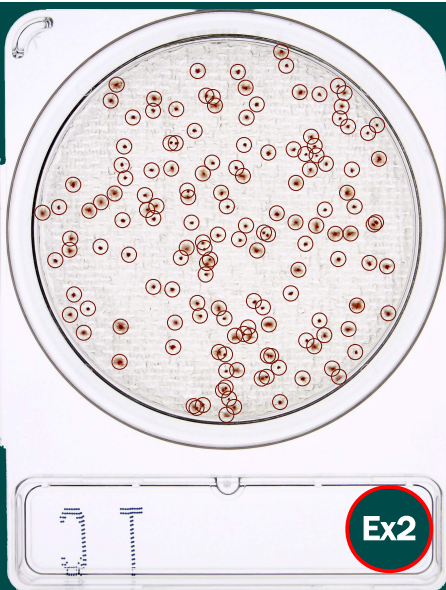


Ex3

In case of more than 300 colonies, the number of colony should be estimated. The average number of colony in the grid (1 cm<sup>2</sup>) is counted, and then the total number of colony is calculated by multiplying the average number by 20.

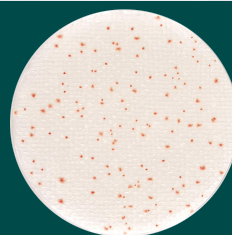


Ex2



Ex2

○: Viable Count = 149 colonies



Ex2

Ex Lighting from the back  
Ex Lighting from the front



Ex4

In case that numerous colonies are observed, a sample extraction should be diluted appropriately, and be inoculated again.

• After opening the aluminum bag, unused plates should be kept in the folded and sealed bag to avoid light and moisture. • Used plates must be sterilized by autoclaving and disposed according to a local waste management law. • In case of foodstuffs containing their own enzymes, there are cases where a whole medium of Compact Dry is stained. • The pictures in this manual has colonies of *E.coli*. There may be subtle differences if other strains grow. • Because of the lighting, there may be subtle differences in vision between in the pictures and in actual tests.

Further Information : Customer Support Section

TEL: +81-3-5846-5711 E-mail: customer@nissui-pharm.co.jp



NISSUI PHARMACEUTICAL CO., LTD.