# Compact Dry™ TC

Ready-to-Use Medium for
**Total Viable Count**

**Compact Dry™** offers a simple and safe procedure to detect and quantify microorganisms in foods, beverages, raw materials, cosmetics, pharmaceuticals, and environmental samples.

Ready-to-use Compact Dry TC plates combine the properties of chromogenic dry media and gel contact plates. The plates contain a nutrient medium enabling total viable count (TVC) easily visualized by the color of the resulting colonies.

The plates provide a quantitative estimation of microorganisms (bacteria, yeast and mold) in a sample. This count is often represented as the number of colony forming units (cfu) per unit of sample.

## About the Test

**Incubation time:** **48 hours ± 3 hours**

**Incubation temperature:** **35 ± 1°C**

**pH Adjustment:** The pH of the product or 1:10 dilution of product should be between 6 and 7 for optimal growth of target microorganisms. If the pH is not between 6 and 7, adjust the pH or the product or 1:10 dilution with 1 N or 0.1 N NaOH for acidic products or 1 N or 0.1 N HCl for alkaline products.

**Interpretation:** Bacterial colonies are colored red due to the triphenyl tetrazolium chloride redox indicator. Colonies are easy to identify and differentiate from possible food residues.

**Storage and shelf life:** Room temperature, +1°C to +30°C, 24 months.

## Manufactured by

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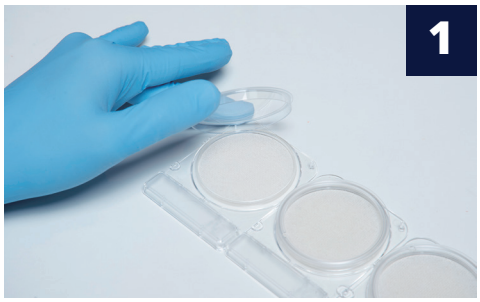
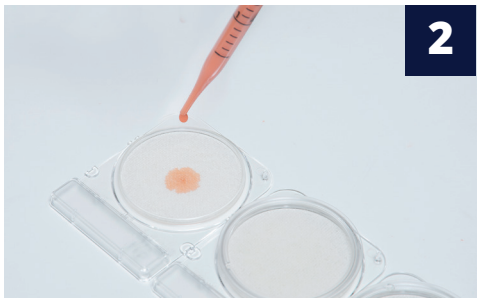
## Customer support and sales

sales@compact-dry.com

## General Testing Protocol

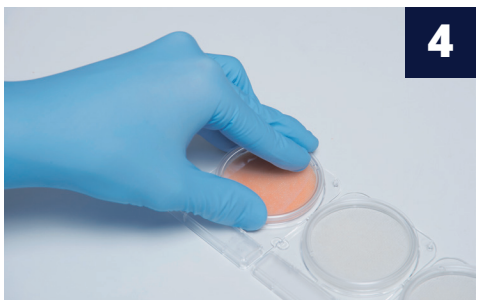



Remove the lid.



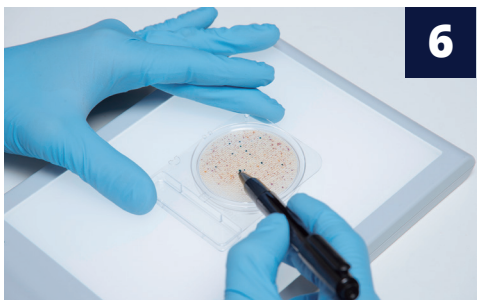

Dispense 1 ml of sample in the middle of the Compact Dry plate.


The sample diffuses passively and evenly across the dehydrated media sheet, rehydrating the dry medium into a gel within seconds.




Replace the lid and label the plate.


Turn over the plate (lid down) and incubate for the appropriate time and temperature.




Following incubation, count the number of colored microbial colonies.

**Interpretation guide on reverse** ➤

# Compact Dry™ TC

## Interpretation

- All colonies growing on Compact Dry TC turn red by the action of 2,3,5-triphenyl tetrazolium chloride: TTC.
- *Bacillus* ssp. are prone to spread and should be counted according the border of the colony.
- All colonies must be counted regardless of color or size.
- Count range 1–300 cfu/plate.

## Enumeration

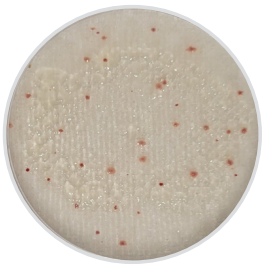
Enumeration of colonies can be performed from the front or the back of the Compact Dry plate. Read against a white background with an adequate light source. The grid lines on the back of the plate are useful when high plate counts are present. Colony morphology is best observed on the front of the plate. Colonies can be sampled for further identification by removing the lid and selecting an isolated colony. Use an inoculating loop to transfer to an agar plate or a pipette tip to place into a growth medium. Gently remove a colony taking care not to disturb the surrounding growth medium.

**Total number of colonies = 0**

No colony growth is observed.

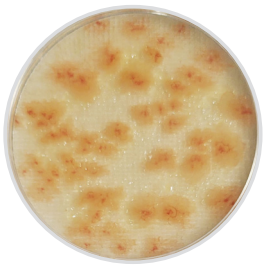
**Total colonies = 14**

*Bacillus* ssp. are prone to spread and should be counted according the border of the colony.



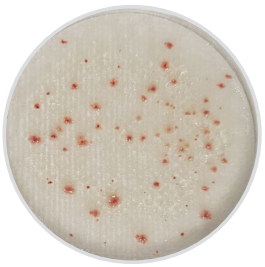
**Total colonies = 37**

Red colonies with irregular borders are observed. The red color distinguishes between bacterial growth and any food particles that may be present. Defined colonies with a small diameter are also included in the total aerobic count.



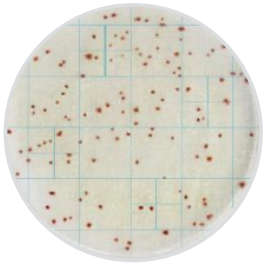
**Total colonies = 51**

*Bacillus* ssp. are prone to spread and should be counted according the border of the colony.



**Total colonies = 60**

Red colonies with irregular borders are observed. Defined colonies with a small diameter are also included in the total aerobic count.

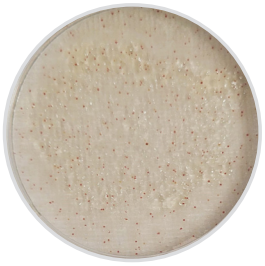


**Total colonies = 123**

This test plate shows a high concentration of colonies; grid lines on the back of the plate can be used to count colonies in quadrants.

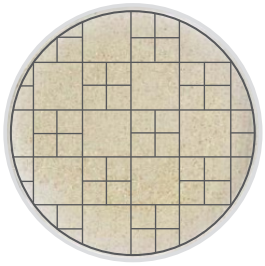
**Total colonies = 161**

Red colonies with irregular borders are observed, as *Bacillus* ssp. are prone to spread. Defined colonies with a small diameter are also included in the total aerobic count.



**Total colonies = 197**

Defined colonies with a small diameter are included in the total aerobic count.



**Total colonies = TNTC**

This plate is too numerous to count. The total number of colonies are outside of the countable limit of the plate (1–300 cfu/plate). The count can be estimated using etched gridlines on the back of the plate. Use the average colony count in a few of the large squares (1 $cm^2$) and multiply by 20 to obtain the approximate plate count. To obtain an accurate plate count further dilution of the sample is recommended.