CompactDry™

Compact Dry[™] TCR

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



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

Compact Dry TCR plates contain nutritional components that promote rapid growth of microorganisms, allowing enumeration after 24 hours of incubation.



Manufactured by

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Customer support and sales

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About the Test

Incubation time: 24 hours ± 2 hours

Testing Protocol and Interpretation

Incubation temperature: $35 \pm 1^{\circ}$ C or $32 \pm 1^{\circ}$ C for dairy matrices

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: The aerobic colonies present a red color, due to the tetrazole salt (redox indicator), facilitating the enumeration of the colonies and allowing them to be distinguished from possible food residues.

Storage and shelf life: Room temperature, +1°C to +30°C, 18 months.

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.



Following incubation, count the number of colored microbial colonies.



Replace the lid and label the plate.



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

Compact Dry[™] TCR



Interpretation

- All colonies growing on Compact Dry TCR turn red by the action of 2,3,5-triphenyl tetrazolium chloride: TTC. The red color distinguishes bacterial growth from debris. To reduce the amount of food particles or debris on the plate, a filtered Whirl-pak bag is recommended for the 1:10 dilution.
- *Bacillus* ssp. are prone to spread and should be counted according the border of the colony.
- All colonies must be counted regardless of 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 This TCR plate has no growth.



Total number of colonies = 35

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



Total number of colonies = 101

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 number of colonies = 191

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 number of colonies = (TNTC)

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 cm²) and multiply by 20 to obtain the approximate plate count. To obtain an accurate plate count further dilution of the sample is recommended.

