

# **Compact Dry™ CF**

Ready-to-Use Medium for Coliform



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

Coliform are characterized as non-sporeforming Gram-negative bacilli, defined by their ability to ferment lactose, and to produce acid and/or carbon dioxide gas.

The Compact Dry CF plate is used for rapid counting of coliform, utilizing the X-Gal chromogenic substrate, which is synthesized forming blue/blue-green colonies. The growth of other types of bacteria is inhibited.



#### **About the Test**

Incubation time: 24 ± 2 hours

Incubation temperature: 35 ± 1°C (raw meat) or 37 ± 1°C (other 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: Coliform form blue/bluegreen colonies.

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

### Manufactured by

Shimadzu Diagnostics Corporation 3-24-6, Ueno, Taito-ku, Tokyo 110-0005 JAPAN Tel: +81-3-5846-5707 contact@sdc.shimadzu.co.jp

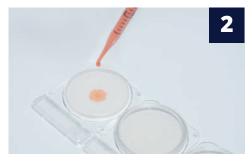
#### **Customer support and sales**

sales@advancedfooddiagnostics.com

## **General Testing Protocol**



Remove the lid.



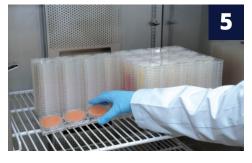
Dispense 1 ml of sample in the middle of the Compact Dry plate.



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

- Coliform growth on the CF plate is indicated by presence of blue/blue-green colonies.
- The morphology of the colonies can vary according to the genus and the species, however all the colonies with blue/green coloration are considered coliform.
- Count range 1-250 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.



Colony count = 0
There is no colony growth on the test plate.



Colony count = 13
Coliform are present with a blue/green color and defined borders.

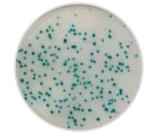


Colony count = 48
Coliform organisms
present are blue/green
in color with defined
borders.



Colony count = 89

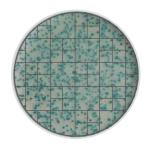
Coliform are present with a blue/green color and defined borders.



Colony count = 226
All colonies present a blue/green coloration with regular and punctual borders; these colonies are part of the coliform enumeration.



Total colonies = TNTC
The total number of colonies are outside of the countable limit of the plate (1–250 cfu/plate).



Total colonies = TNTC

The total number of colonies are outside of the countable limit of the plate (1–250 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.



