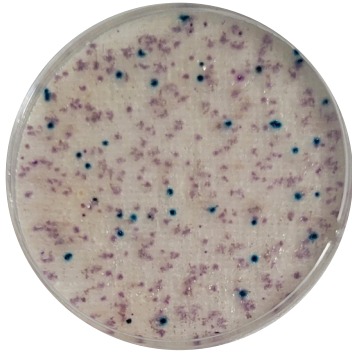




Compact Dry™ EC

Ready-to-Use Medium for
***E. coli* / 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-spore-forming Gram-negative bacilli, defined by their ability to ferment lactose to produce acid and/or carbon dioxide gas.

The enzyme in charge of breaking down lactose is B-galactosidase; present in all coliform. *Escherichia coli* also utilizes 3-glucuronidase. Compact Dry EC contains selective agents and two chromogenic substrates: Magenta-Gal and X-Gluc capable of detecting Coliform B-galactosidase enzyme and *E. coli* B-glucuronidase enzyme, respectively.



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 of 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 are red/pink in color. *Escherichia coli* forms blue/purple-blue colonies. Total Coliform count includes red/pink and purple/blue colony count.

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

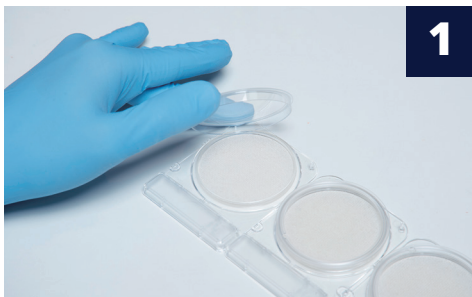
Manufactured by

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

Customer support and sales

sales@compact-dry.com

General Testing Protocol



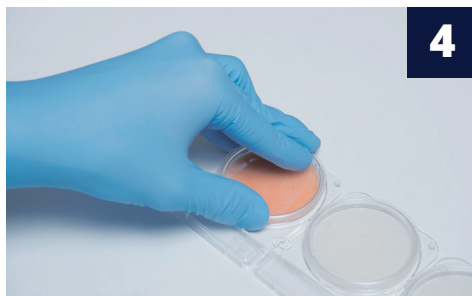
Remove the lid.



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



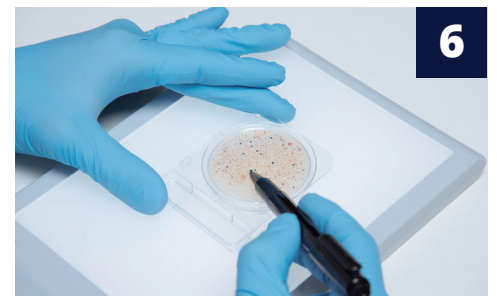
The sample diffuses passively and evenly across the dehydrated media sheet, rehydrating the dry medium into a gel within seconds.



Replace the lid and label the plate.

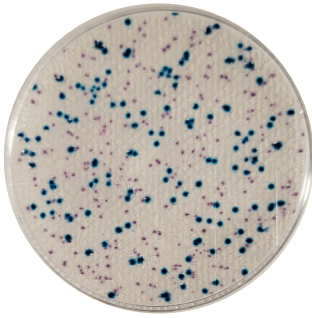


Turn over the plate (lid down) and incubate for the appropriate time and temperature.



Following incubation, count the number of colored microbial colonies.

Interpretation guide on reverse ➤



Interpretation

- Coliform present colony growth with red/pink coloration.
- *E. coli* growth is differentiated by blue/ purple-colored colonies.
- The combined total number of both red and blue colonies is the total number of the coliform group.
- Count range 1–250 cfu/plate.

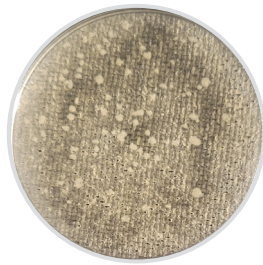
Enumeration

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.



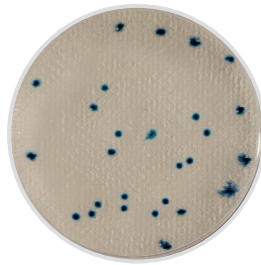
Total count = 0

Coliform and *Escherichia coli* are not present on the plate.



Total count = 0

Coliform and *E. coli* are not present on this plate. Growth of non-target organism is observed with cream colored colonies. These will not be included in the total coliform count. Colonies must be purple or blue to be considered as coliform or *E. coli*.

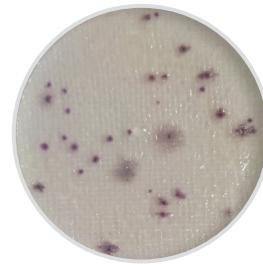


Coliform count = 0

***E. coli* count = 27**

Total coliform = 27

Escherichia coli are present on the plate as blue/green colonies with defined or irregular borders.

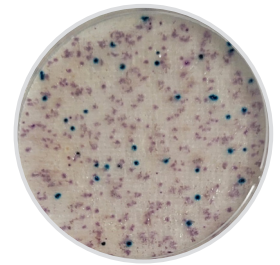


Coliform count = 32

***E. coli* count = 0**

Total coliform = 32

Escherichia coli are not present on the plate. Coliform are present with a purple color and defined as well as irregular borders.

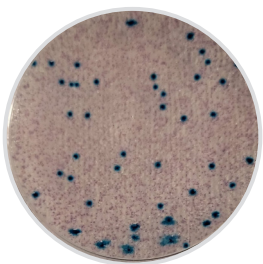


Coliform count = 219

***E. coli* count = 35**

Total coliform = 254

Escherichia coli are present on the plate as blue/green colonies with defined borders. Coliform are present with a purple color and defined as well as irregular borders. Total Coliform count includes all colonies present on the plate.

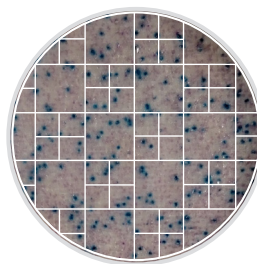


Coliform count – TNTC

***E. coli* count – 45**

Total coliform – TNTC

Escherichia coli are present on the plate as blue/green colonies with defined borders. Coliform are present with a purple color at a level that is too numerous to count. Total Coliform count includes all colonies present on the plate.



Coliform count = (TNTC)

Escherichia coli colonies present are within the countable range of the plate. The total number of coliform 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.