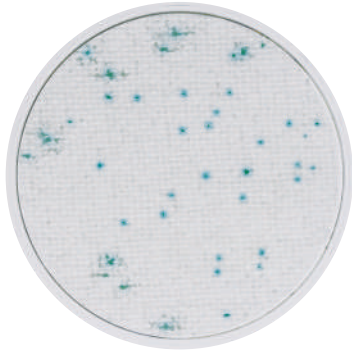




Compact Dry™ BC

Ready-to-Use Medium for
Bacillus cereus



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

Bacillus cereus is a Gram-positive, aerobic, spore-forming bacterium that thrives in soil, vegetables, and various raw and processed food products. *Bacillus* spores can survive in extreme conditions and then germinate when conditions are favorable, making spores difficult to eliminate.

At high bacterial concentration, *B. cereus* produces toxins that are responsible for food poisoning after ingestion of contaminated unrefrigerated prepared food, causing gastroenteritis. Monitoring *B. cereus* during the food production process is critical for food safety as a release parameter for cooked meat, vegetables and ready-to-eat meals.



About the Test

Incubation time: 24 ± 1 hours

Incubation temperature: 30 ± 2°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 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: *Bacillus cereus* forms green/blue colonies. Confirm presumptive colonies according to ISO 7932:2004(E)

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

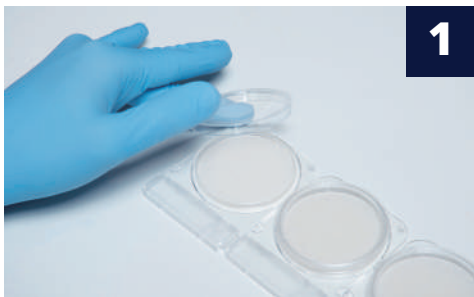
Manufactured by

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.



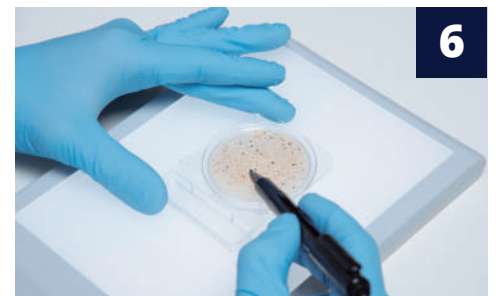
The sample diffuses passively and evenly across the dehydrated media sheet, rehydrating the dry medium into a gel within seconds.



Replace the lid and label the plate.

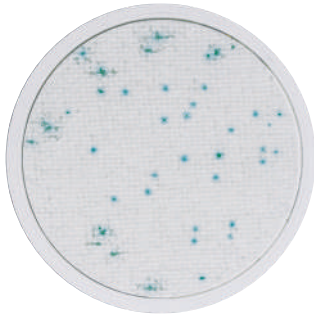


Turn over the plate (lid down) and incubate for the appropriate time and temperature.



Following incubation, count the number of colored microbial colonies.

Interpretation guide on reverse ➤



Interpretation

- *Bacillus cereus* forms blue/pale blue colonies with a diameter of 4–8 mm.
- If presumptive colonies appear, a confirmation step with sheep blood agar according to ISO 7932 is recommended.
- Count range 1–150 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.



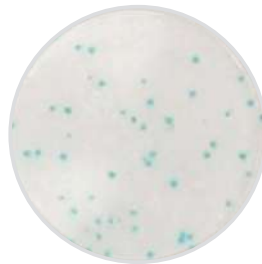
Presumptive *B. cereus* count = 38

The colonies have a large morphology, diffused edges and a flat elevation.



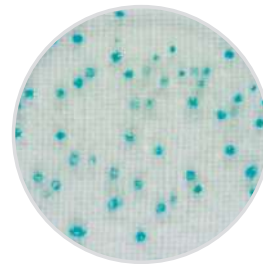
Presumptive *B. cereus* count = 0

There is no colony growth on the test plate. Colorless colonies can grow on this plate but should not be taken into account.



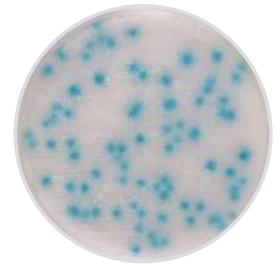
Presumptive *B. cereus* count = 52

The incubation time can be increased by 24 hours in order to better visualize the colonies.



Presumptive *B. cereus* count = 54

The color of the colonies may vary depending on the matrix to be evaluated. Consider all colonies with blue, blue-green and pale blue pigments as presumptive.



Presumptive *B. cereus* count = 81