# Testing Protocol and Interpretation

# CompactDry™

# Compact Dry<sup>™</sup> YM

Ready-to-Use Medium for Yeast and Mold



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

Yeast and mold display different colony morphology and color due to the chromogenic substrate present in the media. X-Phos is degraded by growing yeast presenting a blue coloration of the colony, yeast will appear as blue or cream colonies.

Bacterial growth is inhibited by antibiotics. The head space in the Compact Dry plate allows mold to develop their characteristic filamentous shape due to growing mycelium.



#### About the Test

#### Incubation time: 5-7 days

#### Incubation temperature: 25 ± 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:** Yeast are blue or cream colored. Molds form filamentous colonies with distinct shape and characteristic color.

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

#### Manufactured by

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

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## **General Testing Protocol**



Remove the lid.



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



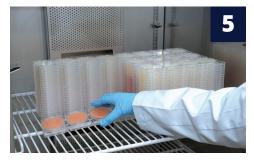
The sample diffuses passively and evenly across the dehydrated media sheet, rehydrating the dry medium into a gel within seconds.



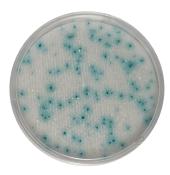
Following incubation, count the number of colored microbial colonies.



Replace the lid and label the plate.



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



### Interpretation

- Count all clear-shaped blue and white/cream colonies that grew on the plate as yeast.
- Count all filamentous colonies as mold.
- All colonies must be counted regardless of color or size.
- 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.



Yeast and/or mold count = 0

Total colonies = 84

variable shades of green

few colonies are present

early in development as

round white filamentous

colonies. Another genus

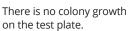
displays black filamented

hyphae development with a yellowing of the media around the colonies.

AOAC

relating to the genus. A

Mold colonies are observed as circular with





**Total colonies = 28** Yeast appear as cream colored colonies.



Total colonies = 30

Mold colonies are observed as circular with variable shades of green relating to the genus. A few colonies are present early in development as round white filamentous colonies. Another genus displays black filamented hyphae development with a yellowing of the media around the colonies.



Total colonies = 80

**5-day incubation:** Yeast appear as blue/blue-green colonies with a zone of colorization surrounding the colony. All colonies regardless of size are included in the plate count.



7-day incubation: Yeast appear as blue/blue-green colonies with a zone of colorization surrounding the colony. All colonies regardless of size are included in the plate count at 7 days. No significant difference was observed in the plate count with additional incubation.



#### Total colonies = TNTC

This plate is too numerous to count. The total number of colonies are outside of the countable limit of the plate (1–150 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<sup>2</sup>) and multiply by 20 to obtain the approximate plate count. To obtain an accurate plate count further dilution of the sample is recommended.

