



## Charm® Peel Plate® Microbial Tests

Simplified Culture Method For Detecting Microorganisms



# Introduction

## Benefits Of Charm Peel Plate Microbial Tests

- Ready-to-use. Just add sample/dilution. No spreading device needed.
- Etched grid lines for estimated counts.
- Colonies easily picked for additional isolation/classification.
- Convenient plate stacking for improved air circulation.
- Buffered formulation – pH adjustment required for most samples.
- 12 month room temperature or refrigerated shelf-life in a resealable foil zip bag.
- 47 mm diameter convenient for sample filters and 100 mL or larger liquid samples, like water, wine and beverages.
- Robust performance with neutralizing buffers used in environmental surface samples.

**Charm, Where the Science of Food Safety is a Way of Life.**

**Charm Peel Plate Microbial Tests are simplified culture methods for detecting microorganisms.** AOAC-RI recently granted performance tested method status to Charm Peel Plate AC, EC, and YM tests. The Peel Plate EB Microbial Test received MicroVal certification harmonized with AOAC Official Method of Analysis First Action Status. The methods follow conventional microbiologic procedures for time and temperature of incubation. An air gap between the plate and cover allows colony picking and determination of microbial morphology. Peel Plate tests are for use in dairy products, ground meats, other foods, contact environmental surfaces, and water. There are 1 mL sample volume Peel Plate tests for aerobic bacteria (Peel Plate AC test), heterotrophic count (Peel Plate HET test) and *Staphylococcus Aureus* (Peel Plate SA test). There are 1 mL and 5 mL (High Volume) tests for coliform count (Peel Plate CC test), coliforms/*E. coli* (Peel Plate EC test), enterobacteriaceae (Peel Plate EB test), and yeast and mold (Peel Plate YM test).

Each version of these tests contains non-selective or selective medium with color producing enzyme substrates to produce visual colonies.

## Procedure

The tests are prepared media in a shallow dish with an adhesive top. Just add the sample to the middle and it diffuses through the media and solidifies. Invert the test, stack multiple tests together (if appropriate), and incubate. The Peel Plate tests are intended for microbiological laboratories, but may also be used by food quality stakeholders such as farmers, milk processors, and water municipalities.

**Simple procedure with clear and accurate results:**



**Peel**



**Vertically Pipet**  
within 2 to 3 seconds



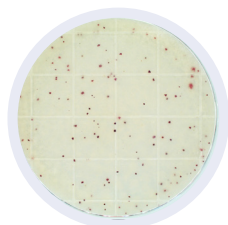
**Seal**



**Incubate**  
at specified temperature  
and times.

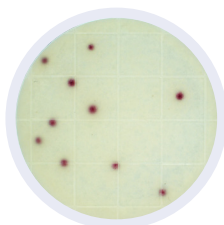


# Charm Peel Plates



## Charm Peel Plate AC Microbial Test

(Aerobic Count) use conventional standard plate count formulation with red producing TTC enzyme substrate. Aerobic bacteria produce red colonies.

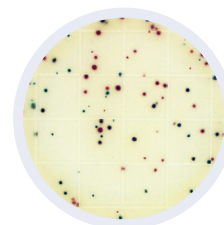


## Charm Peel Plate CC Microbial Test

(Coliform) use conventional EC media with color producing enzyme substrates and produce easy to interpret red colonies.

A **Peel Plate CC Microbial Test for Cultured Dairy** is also available.

**High Volume** versions are available for 5 mL sample.

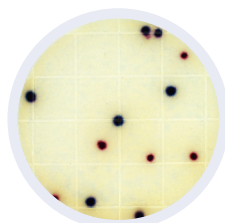


## Charm Peel Plate EB Microbial Test

(Enterobacteriaceae) use conventional EB formulation and produces colored colonies.

A **Peel Plate EB Microbial Test for Cultured Dairy** is also available.

**High Volume** versions are available for 5 mL sample.

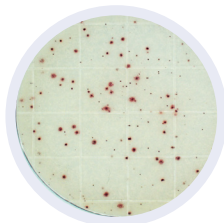


## Charm Peel Plate EC Microbial Test

(*E. coli* and Coliform) use conventional EC media with color producing enzyme substrates. Coliforms produce easy to interpret red colonies. Generic *E. coli* produce blue/purple colonies.

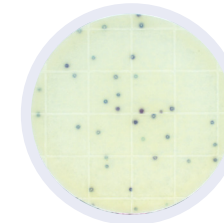
A **Peel Plate EC Microbial Test for Cultured Dairy** is also available.

**High Volume** versions are available for 5 mL sample.



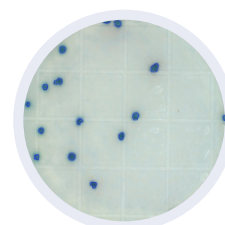
## Charm Peel Plate HET Microbial Test

(Heterotrophic Count) use conventional R2A formulation with red producing TTC enzyme substrate. Aerobic bacteria produce red colonies.



## Charm Peel Plate SA Microbial Test

(*Staphylococcus aureus*) use conventional Baird Parker Agar formulation with dark purple producing enzyme substrate. *Staphylococcus aureus* produce purple colonies with white centers.



## Charm Peel Plate YM Microbial Test

(Yeast and Mold) use conventional potato dextrose formulation and produces blue/green colonies.

**High Volume** versions are available for 5 mL sample.

## Time and Incubation:

	AC	CC	EB	EC	HET	SA	YM
Time	48 ± 3 hr	24 ± 2 hr	24 to 48 hr	24 ± 2 hr	5 to 7 days	24 to 48 hr	3 to 5 days
TEMPERATURE							
Dairy	32 °C ± 1°	32 °C ± 1°	37 °C ± 1°	32 °C ± 1°	N/A	35 to 37 °C	25 °C ± 3°
Water	N/A	N/A	N/A	35 °C ± 1°	20 to 28 °C	N/A	N/A
Other Products	35 °C ± 1°	35 °C ± 1°	37 °C ± 1°	35 °C ± 1°	N/A	35 to 37 °C	25 °C ± 3°



# Order Codes

Peel Plate AC Microbial Test	Item #
50 test	PP-AC-50K
100 test	PP-AC-100K
1000 test	PP-AC-1000K

Peel Plate CC Microbial Test	Item #
50 test	PP-CC-50K
100 test	PP-CC-100K
1000 test	PP-CC-1000K
25 test - High Volume	PP-CCHV-25K
100 test - High Volume	PP-CCHV-100K
50 test - Cultured Dairy	PP-CC-CD-50K
100 test - Cultured Dairy	PP-CC-CD-100K
1000 test - Cultured Dairy	PP-CC-CD-1000K
25 test - Cultured Dairy, High Volume	PP-CC-CD-HV-25K
100 test - Cultured Dairy, High Volume	PP-CC-CD-HV-100K

Peel Plate EB Microbial Test	Item #
50 test	PP-EB-50K
100 test	PP-EB-100K
1000 test	PP-EB-1000K
25 test - High Volume	PP-EBHV-25K
100 test - High Volume	PP-EBHV-100K
50 test - Cultured Dairy	PP-EB-CD-50K
100 test - Cultured Dairy	PP-EB-CD-100K
1000 test - Cultured Dairy	PP-EB-CD-1000K
25 test - Cultured Dairy, High Volume	PP-EB-CD-HV-25K
100 test - Cultured Dairy, High Volume	PP-EB-CD-HV-100K

Peel Plate EC Microbial Test	Item #
50 test	PP-EC-50K
100 test	PP-EC-100K
1000 test	PP-EC-1000K
25 test - High Volume	PP-ECHV-25K
100 test - High Volume	PP-ECHV-100K
50 test - Cultured Dairy	PP-EC-CD-50K
100 test - Cultured Dairy	PP-EC-CD-100K
1000 test - Cultured Dairy	PP-EC-CD-1000K
25 test - Cultured Dairy, High Volume	PP-EC-CD-HV-25K
100 test - Cultured Dairy, High Volume	PP-EC-CD-HV-100K

Peel Plate HET Microbial Test	Item #
50 test	PP-HET-50K
100 test	PP-HET-100K
1000 test	PP-HET-1000K

Peel Plate SA Microbial Test	Item #
50 test	PP-SA-50K
100 test	PP-SA-100K
1000 test	PP-SA-1000K

Peel Plate YM Microbial Test	Item #
50 test	PP-AC-50K
100 test	PP-AC-100K
1000 test	PP-AC-1000K
25 test - High Volume	PP-YMHV-25K
100 test - High Volume	PP-YMHV-100K