

Partnering for Your Food Safety

NELSON JAMESON
INC.

3M

1-800-826-8302
nelsonjameson.com
sales@nelsonjameson.com

A leader in food safety solutions, Nelson-Jameson has an extensive array of laboratory and QA/QC products including:

Allergen Detection

ATP Testing

Temperature Monitoring

Environmental Testing

Weighing

pH

Chemicals & Reagents

Your Safe, Quality Food is Our Business

Introducing the New Efficiency of Food Safety

3M™ Petrifilm™ Plate Reader Advanced

A compact instrument that automates the enumeration of 10 different 3M™ Petrifilm™ Plates and the 3M™ Petrifilm™ Staph Express Disk to enhance laboratory productivity and ensure accurate, consistent readings.



3M

3M™ Petrifilm™ Plate Reader Advanced

*Compatible with the following
3M™ Petrifilm™ Plates:*

Rapid Aerobic Count

Rapid Coliform Count

Rapid E.coli/Coliform Count

Rapid Yeast and Mold Count

Aerobic Count

Coliform Count

Enterobacteriaceae Count

E.coli/Coliform Count

Select E.coli Count

Staph Express Count

Staph Express Disk

3M

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Petrifilm™



Sample Plates



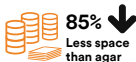
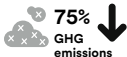
Petrifilm™

Fast, easy-to-use and reliable.

- Ready-to-use plates
- Proven test methods
- Improves productivity
- Consistent, reliable results
- Compact size maximizes incubator space
- Less storage space required
- Reduced waste and waste disposal costs
- Simplified and improved stock control



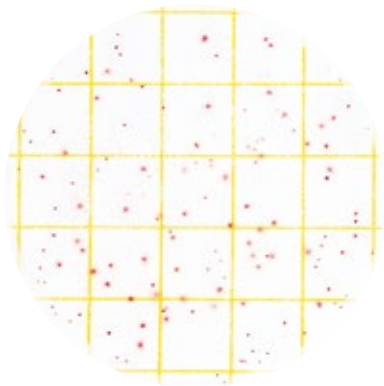
A more sustainable solution* for the environment and your business.



* Results compared to agar plates

Sample Plates

3M | Petrifilm™



Aerobic Bacteria Count: 135

Count all red colonies regardless of size or intensity.

AC

Aerobic Count Plate

Product Code	6400 (box of 100 units) 6406 (box of 1,000 units)
Method: AOAC® Official Method of Analysis SM	Milk and Dairy Products 48h ± 3h at 32°C ± 1°C All Other Foods 48h ± 3h at 35°C ± 1°C
NF Validation by AFNOR Certification	For All Foods 72h ± 3h at 30°C ± 1°C All Foods Except Dairy and Raw Shellfish 48h ± 3h at 30°C ± 1°C
Incubation	Stacks of 20 or less
Optimum pH Range	6.6–7.2
Recommended Counting Range	<300 CFU
Counting Area	20cm ²
Spreader Type	3M™ Petrifilm™ Spreader

Visit the 3M Food Safety website at [3M.com/Petrifilm](https://www.3m.com/Petrifilm) for product information and product instructions which include information regarding validation recognition, scope and end of validity.

AC
Aerobic Count Plate

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Aerobic Bacteria Count: TNTC

Estimate count by counting colonies in one square and multiply by 20 (counting area).

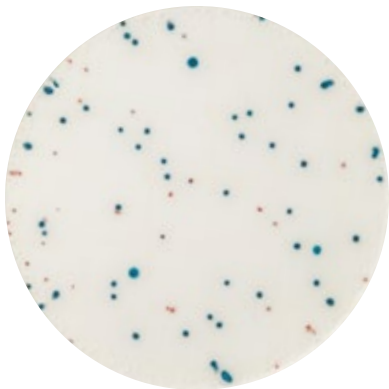
AC

Aerobic Count Plate

Product Code	6400 (box of 100 units) 6406 (box of 1,000 units)
Method: AOAC® Official Method of Analysis SM	Milk and Dairy Products 48h ± 3h at 32°C ± 1°C All Other Foods 48h ± 3h at 35°C ± 1°C
NF Validation by AFNOR Certification	For All Foods 72h ± 3h at 30°C ± 1°C All Foods Except Dairy and Raw Shellfish 48h ± 3h at 30°C ± 1°C
Incubation	Stacks of 20 or less
Optimum pH Range	6.6–7.2
Recommended Counting Range	<300 CFU
Counting Area	20cm ²
Spreader Type	3M™ Petrifilm™ Spreader

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AC
Aerobic Count Plate



Aerobic Bacteria Count: 88

Blue and red indicator dyes in the plate color the colonies. Count all colonies regardless of their size or color intensity.

RAC
Rapid Aerobic Count Plate



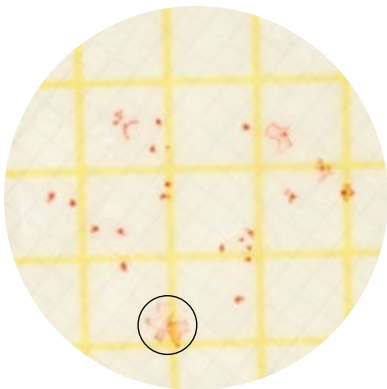
Product Code	6478 (box of 50 units) 6479 (case of 500 units)
Method: AOAC® Official Method of Analysis SM	Dairy (Not Including Powders) and Seafood 24h ± 2h at 32°C ± 1°C All Other Foods 24h ± 2h at 35°C ± 1°C Dairy Powders Including Whey Powders 48h ± 3h at 32°C ± 1°C
NF Validation by AFNOR Certification	Non-Powdered Dairy Products 28h ± 2h at 30°C ± 1°C Powdered Milk 48h ± 3h at 30°C ± 1°C
Incubation	Stacks of 40 or less (SMEDP: 20 or less)
Optimum pH Range	>5.0
Recommended Counting Range	<300 CFU
Counting Area	30cm ²
Spreader Type	3M™ Petrifilm™ Flat Spreader

Visit the 3M Food Safety website at [3M.com/Petrifilm](https://www.3m.com/Petrifilm) for product information and product instructions which include information regarding validation recognition, scope and end of validity.

RAC
Rapid Aerobic Count Plate



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Heterotrophic Count: 24

AQHC (Filter or Direct Plating)
Aqua Heterotrophic Count Plate

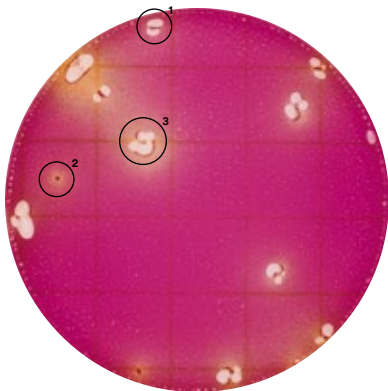


Product Code	6450 (box of 100 units) 6452 (box of 1,000 units) If using filter, hydrate plate before inserting filter.
Method: Plate with Filter Procedure	48h ± 3h at 35°C ± 2°C
Method: Direct Plate Procedure	44h ± 4h at 36°C ± 2°C or 68h ± 4h at 22°C ± 2°C
Incubation	Stacks of 20 or less
Optimum pH Range	Not Applicable
Recommended Counting Range	<300 Direct Plating
Counting Area	20cm ²
Spreader Type	3M™ Petrifilm™ Spreader

Visit the 3M Food Safety website at 3M.com/Petrifilm for product information and product instructions which include information regarding validation recognition, scope and end of validity.

AQHC (Filter or Direct Plating)
Aqua Heterotrophic Count Plate





***Enterobacteriaceae* Count: 13**

Enterobacteriaceae are red colonies with yellow zones and/or red colonies with gas bubbles with or without yellow zones.

EB

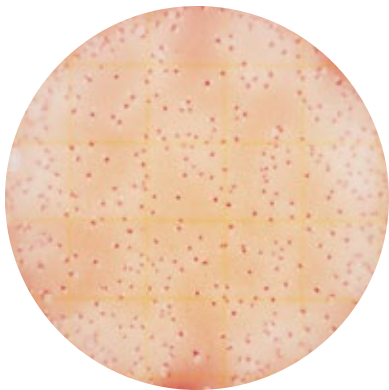
***Enterobacteriaceae* Count Plate**

Product Code	6420 (box of 50 units) 6421 (box of 1,000 units)
Method: AOAC® Official Method of Analysis SM	Selected Foods 24h ± 2h at 37°C ± 1°C
NF Validation by AFNOR Certification	All Human Food Products, Animal Feed and Industrial Environmental Samples 24h ± 2h at 30°C ± 1°C or 37°C ± 1°C
Incubation	Stacks of 20 or less
Optimum pH Range	6.5–7.5
Recommended Counting Range	<100 CFU
Counting Area	20cm ²
Spreader Type	3M™ Petrifilm™ Spreader

Visit the 3M Food Safety website at 3M.com/Petrifilm for product information and product instructions which include information regarding validation recognition, scope and end of validity.

EB

Enterobacteriaceae Count Plate



***Enterobacteriaceae* Count: TNTC** (Estimated Count: 380)

One of the following characteristics should be present when determining TNTC: Light color background, many small colonies or many gas bubbles.

EB

***Enterobacteriaceae* Count Plate**

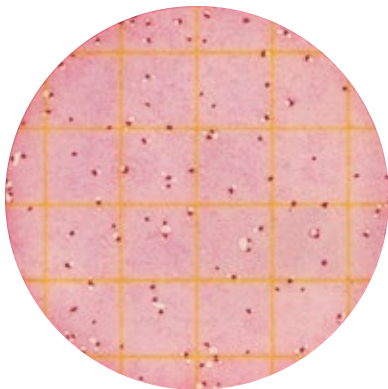
Product Code	6420 (box of 50 units) 6421 (box of 1,000 units)
Method: AOAC® Official Method of Analysis SM	Selected Foods 24h ± 2h at 37°C ± 1°C
NF Validation by AFNOR Certification	All Human Food Products, Animal Feed and Industrial Environmental Samples 24h ± 2h at 30°C ± 1°C or 37°C ± 1°C
Incubation	Stacks of 20 or less
Optimum pH Range	6.5–7.5
Recommended Counting Range	<100 CFU
Counting Area	20cm ²
Spreader Type	3M™ Petrifilm™ Spreader

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EB

Enterobacteriaceae Count Plate

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AOAC® OMA, NF Validation Certified Method 3M 01/02–09/89 B

Coliform Count: 69 (colonies with gas)

NF Validation by AFNOR Certified Method 3M 01/02–09/89 A and
01/02–09/89 C

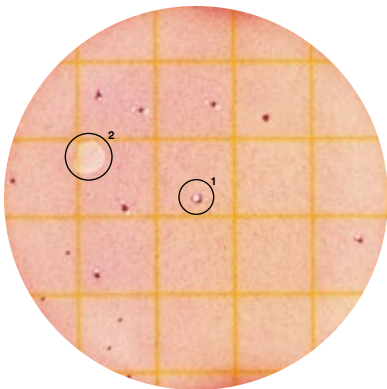
Coliform Count: 97 (total colonies)

CC

Coliform Count Plate

Product Code	6410 (box of 50 units) 6416 (box of 1,000 units)
Method: AOAC® Official Method of Analysis SM	Milk and Other Dairy Products 24h ± 2h at 32°C ± 1°C Foods 24h ± 2h at 35°C ± 1°C
NF Validation by AFNOR Certification 3M 01/02-09/89 A All Human Food Products (Except Raw Shellfish), Pet Food and Environmental Samples 24h ± 2h at 30°C ± 1°C or 37°C ± 1°C	3M 01/02-09/89 B All Human Food Products (Except Raw Shellfish) 24h ± 2h at 30°C ± 1°C or 37°C ± 1°C 3M 01/02-09/89 C All Human Food Products 24h ± 2h at 44°C ± 1°C
Incubation	Stacks of 20 or less
Optimum pH Range	6.6-7.2
Recommended Counting Range	<150 CFU
Counting Area	20cm ²
Spreader Type	3M™ Petrifilm™ Spreader

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Coliform Count: 8 (colonies with gas)

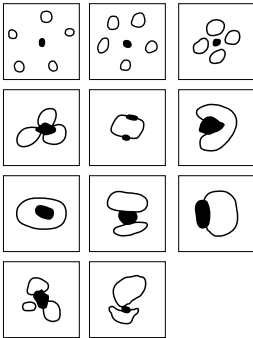
Coliform Count: 13 (total colonies)

Circle 1: Gas may disrupt the colony so that the colony “outlines” the bubble.

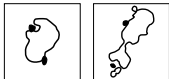
Circle 2: Artifact bubble may be caused from trapped air within the sample or improper inoculation.



Images below should be enumerated as one colony.



Images below should be enumerated as two colonies.



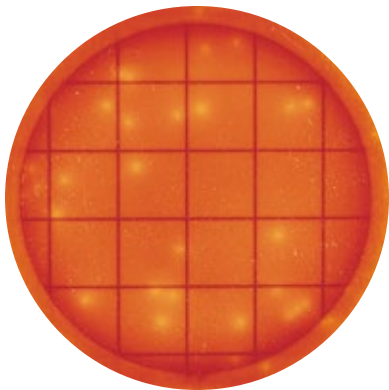
Bubbles

The illustrations above show examples of various bubble patterns associated with gas producing colonies. These examples apply to the following plates: HSCC, CC, EC/CC, EB, RCC, LAB. It is possible to see more than one bubble pattern on one 3M™ Petrifilm™ Coliform Count Plate.

CC

Coliform Count Plate

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Coliform Enumeration by Acid Zones
(6–14 hours)

RCC
Rapid Coliform Count Plate



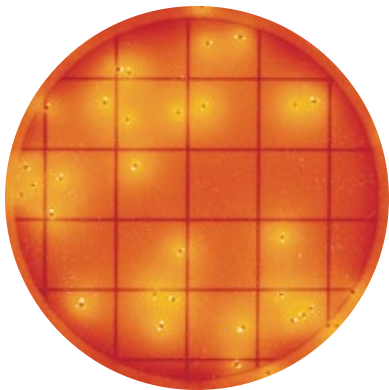
Product Code	6402 (box of 50 units) 6412 (box of 500 units)
Method: AOAC® Official Method of Analysis SM	Foods Up to 24h ± 2h at 35°C ± 1°C
NF Validation by AFNOR Certification	Processed Pork and Seafood 14h ± 30min at 30°C ± 1°C or 24h ± 2h at 30°C ± 1°C All Other Human Foods 14h ± 30min at 35°C ± 1°C or 24h ± 2h at 35°C ± 1°C
Incubation	Stacks of 20 or less
Optimum pH Range	6.5–7.5
Recommended Counting Range	<150 CFU
Counting Area	20cm ²
Spreader Type	3M™ Petrifilm™ Spreader

Visit the 3M Food Safety website at [3M.com/Petrifilm](https://www.3m.com/Petrifilm) for product information and product instructions which include information regarding validation recognition, scope and end of validity.

RCC
Rapid Coliform Count Plate



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Coliform Colony Enumeration
(8–24 hours)

RCC
Rapid Coliform Count Plate



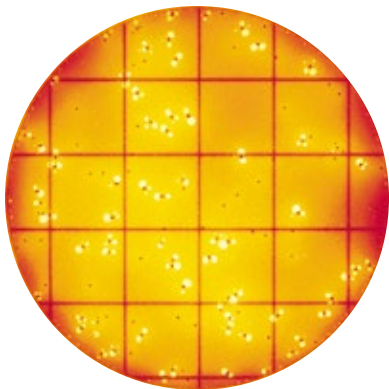
Product Code	6402 (box of 50 units) 6412 (box of 500 units)
Method: AOAC® Official Method of Analysis SM	Foods Up to 24h ± 2h at 35°C ± 1°C
NF Validation by AFNOR Certification	Processed Pork and Seafood 14h ± 30min at 30°C ± 1°C or 24h ± 2h at 30°C ± 1°C All Other Human Foods 14h ± 30min at 35°C ± 1°C or 24h ± 2h at 35°C ± 1°C
Incubation	Stacks of 20 or less
Optimum pH Range	6.5–7.5
Recommended Counting Range	<150 CFU
Counting Area	20cm ²
Spreader Type	3M™ Petrifilm™ Spreader

Visit the 3M Food Safety website at [3M.com/Petrifilm](https://www.3m.com/Petrifilm) for product information and product instructions which include information regarding validation recognition, scope and end of validity.

RCC
Rapid Coliform Count Plate



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Coliform Colony Enumeration
(24 hours)

RCC
Rapid Coliform Count Plate



Product Code	6402 (box of 50 units) 6412 (box of 500 units)
Method: AOAC® Official Method of Analysis SM	Foods Up to 24h ± 2h at 35°C ± 1°C
NF Validation by AFNOR Certification	Processed Pork and Seafood 14h ± 30min at 30°C ± 1°C or 24h ± 2h at 30°C ± 1°C All Other Human Foods 14h ± 30min at 35°C ± 1°C or 24h ± 2h at 35°C ± 1°C
Incubation	Stacks of 20 or less
Optimum pH Range	6.5–7.5
Recommended Counting Range	<150 CFU
Counting Area	20cm ²
Spreader Type	3M™ Petrifilm™ Spreader

Visit the 3M Food Safety website at [3M.com/Petrifilm](https://www.3m.com/Petrifilm) for product information and product instructions which include information regarding validation recognition, scope and end of validity.

RCC
Rapid Coliform Count Plate



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Coliform Count: 4

Note: 5mL of samples are used to inoculate plate to increase sensitivity.

HSCC

High-Sensitivity Coliform Count Plate

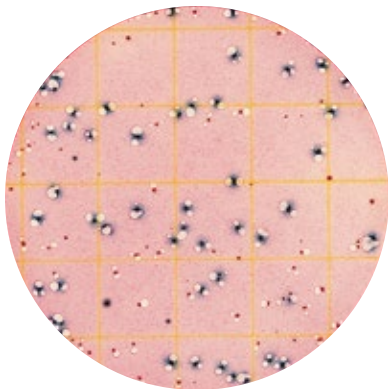
Product Code	6405 (box of 50 units) 6415 (box of 500 units)
Method: AOAC® Official Method of Analysis SM	Dairy Products 24h ± 2h at 32°C ± 1°C
NF Validation by AFNOR Certification	Human Food Products 24h ± 2h at 30°C ± 1°C or 37°C ± 1°C
Method	Thermotolerant Coliforms 24h ± 2h at 44°C ± 1°C Incubator humidification is required at this elevated temperature.
Incubation	Stacks of 10 or less
Optimum pH Range	6.5–7.5
Recommended Counting Range	<150 CFU
Counting Area	60cm ²
Spreader Type	3M™ Petrifilm™ High Sensitivity Spreader (6481)

Visit the 3M Food Safety website at [3M.com/Petrifilm](https://www.3m.com/Petrifilm) for product information and product instructions which include information regarding validation recognition, scope and end of validity.

HSCC

High-Sensitivity Coliform Count Plate

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***E. coli* Count: 49** (blue colonies with gas)

Total Coliform Count: 87 (red and blue colonies with gas)

EC

***E. coli*/Coliform Count Plate**

Product Code	6404 (box of 50 units) 6414 (box of 500 units)
Method: AOAC® Official Method of Analysis SM	Coliform in Foods 24h ± 2h at 35°C ± 1°C <i>E. coli</i> in Foods 48h ± 4h at 35°C ± 1°C Poultry, Meats and Seafood Coliforms and <i>E. coli</i> 24h ± 2h at 35°C ± 1°C
Incubation	Stacks of 20 or less
Optimum pH Range	6.6–7.2
Recommended Counting Range	<150 CFU
Counting Area	20cm ²
Spreader Type	3M™ Petrifilm™ Spreader

Visit the 3M Food Safety website at 3M.com/Petrifilm for product information and product instructions which include information regarding validation recognition, scope and end of validity.

EC

E. coli/Coliform Count Plate



***E. coli* Count: 29** (blue colonies with and without gas)

Total Coliform Count: 60 (red colonies with gas and blue colonies)

Total Coliform Count: 60 (red and blue colonies)

REC

Rapid *E. coli*/Coliform Count Plate



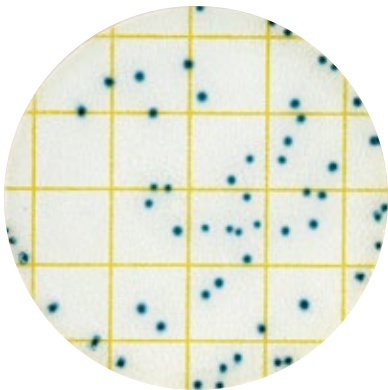
Product Code	6436 (box of 50 units) 6437 (box of 500 units)
Method: AOAC® Performance Method Tested SM	Dairy Products 18–24h at 30°C ± 1°C or 32°C ± 1°C (coliforms and <i>E. coli</i>) or 42°C ± 1°C (<i>E. coli</i>) Other Foods, Pet Food and Environmental Samples 18–24h at 35°C ± 1°C or 37°C ± 1°C (coliforms and <i>E. coli</i>) or 42°C ± 1°C (<i>E. coli</i>)
MicroVal Certification	Dairy Products 18-24h at 30°C ± 1°C (coliforms and <i>E. coli</i>) or 42°C ± 1°C (<i>E. coli</i>) Other Food, Pet Food and Environmental Samples 18-24h at 37°C ± 1°C (coliforms and <i>E. coli</i>) or 42°C ± 1°C (<i>E. coli</i>)
Incubation	Stacks of 20 or less
Optimum pH Range	>5
Recommended Counting Range	<i>E. coli</i> <100 blue to blue green colonies Total Coliform <100 total colonies
Counting Area	30cm ²
Spreader Type	3M™ Petrifilm™ Flat Spreader

Visit the 3M Food Safety website at 3M.com/Petrifilm for product information and product instructions which include information regarding validation recognition, scope and end of validity.

REC
Rapid *E. coli*/Coliform Count Plate



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E. coli Count: 56

SEC

Select *E. coli* Count Plate

Product Code	6434 (box of 50 units) 6435 (box of 500 units)
NF Validation by AFNOR Certification	All Human Food Products, Pet Food and Industrial Environmental Samples 24h ± 2h at 42°C ± 1°C
Incubation	Stacks of 20 or less
Optimum pH Range	6.5–7.5
Recommended Counting Range	<150 CFU
Counting Area	20cm ²
Spreader Type	3M™ Petrifilm™ Spreader

Sold in select regions only.

Visit the 3M Food Safety website at [3M.com/Petrifilm](https://www.3m.com/Petrifilm) for product information and product instructions which include information regarding validation recognition, scope and end of validity.

SEC

Select *E. coli* Count Plate

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***S. aureus* Count: 116**

Red-violet colonies are *S. aureus*.

STX

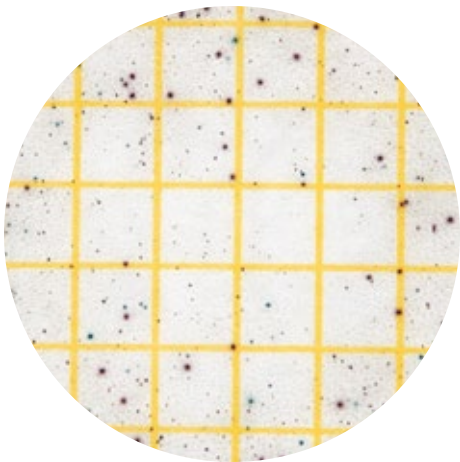
Staph Express Count Plate

Product Code	Plates 6490 (box of 50 units) 6491 (box of 500 units) Disks 6492 (box of 20 units) 6493 (box of 100 units)
Method: AOAC® Official Method of Analysis SM	In Food Plate: 24h ± 2h at 35°C ± 1°C or 37°C ± 1°C Disk: 1–3h at 35°C ± 1°C or 37°C ± 1°C
NF Validation by AFNOR Certification	All Human Food and Pet Food Plate: 24h ± 2h at 37°C ± 1°C Disk: 3h at 37°C ± 1°C
Incubation	Stacks of 20 or less
Optimum pH Range	6.0–8.0
Recommended Counting Range	<150 CFU
Counting Area	30cm ²
Spreader Type	3M™ Petrifilm™ Flat Spreader

Visit the 3M Food Safety website at 3M.com/Petrifilm for product information and product instructions which include information regarding validation recognition, scope and end of validity.

STX
Staph Express Count Plate

3M | Petrifilm™

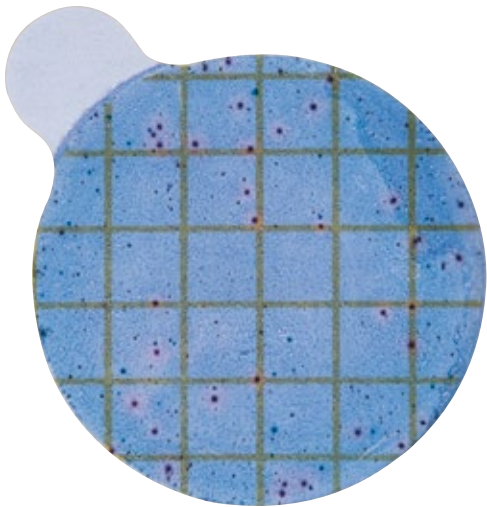


Red-violet colonies are *S. aureus*. Blue-green colonies are not *S. aureus*. Black colonies may or may not be *S. aureus*. If colony colors other than red-violet are present, use a 3M™ Petrifilm™ STX Disk before counting *S. aureus*.

STX

Staph Express Count Plate

3M | Petrifilm™



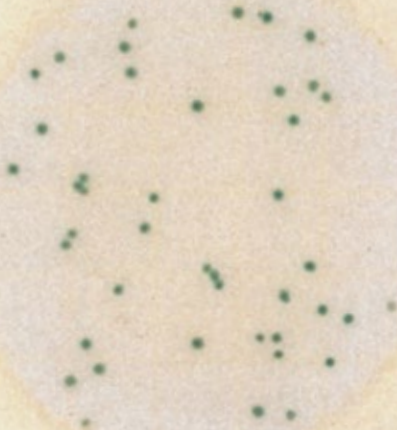
Pink zones form with DNase reaction from *S. aureus*.

STX

Staph Express Count Plate

3M

Petrifilm™



Yeast Count: 44

Yeast Characteristics: Small colonies, colony has defined edges, color can range off-white to blue-green, colony may appear raised and typically uniform in color — no fading.

YM

Yeast and Mold Count Plate

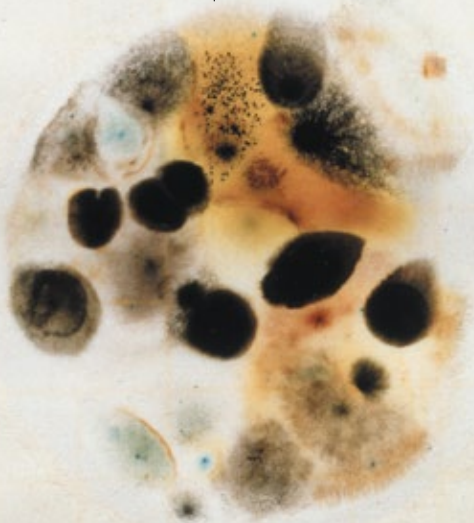
Product Code	6407 (box of 100 units) 6417 (box of 1,000 units)
Method: AOAC® Official Method of Analysis SM	Foods 5 days at 20–25°C
Incubation	Stacks of 20 or less
Optimum pH Range	Not Applicable
Recommended Counting Range	<150 CFU
Counting Area	30cm ²
Spreader Type	3M™ Petrifilm™ Yeast and Mold Spreader

Visit the 3M Food Safety website at [3M.com/Petrifilm](https://www.3m.com/Petrifilm) for product information and product instructions which include information regarding validation recognition, scope and end of validity.

YM

Yeast and Mold Count Plate

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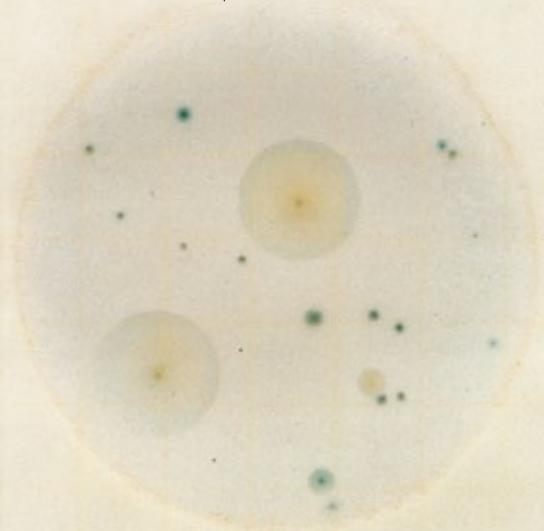
Mold Count: 27

Mold Characteristics: Diffused edges, variable color, colonies appear flat and usually a foci in the middle of colonies.

YM

Yeast and Mold Count Plate

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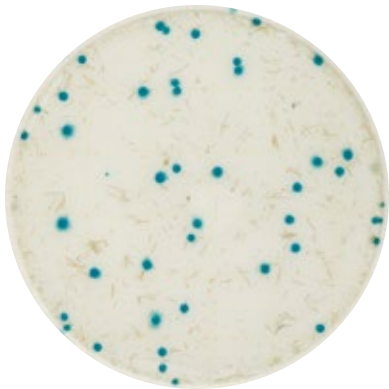


Total Count: 20 (Yeast Count: 16, Mold Count: 4)

Contains both yeast colonies and mold colonies.

YM

Yeast and Mold Count Plate



Yeast Count: 44 (after 48 hours)

Yeast Characteristics: Small colonies, colonies have defined edges, pink-tan to blue-green in color, colonies appear raised (3 dimensional) and colonies have a uniform color.

RYM

Rapid Yeast and Mold Count Plate



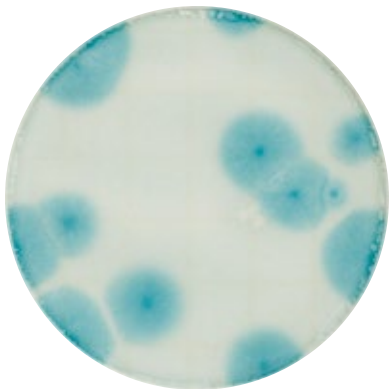
Product Code	6475 (box of 50 units) 6477 (case of 500 units)
Method: AOAC® Official Method of Analysis SM	Select Foods 48–60h at 25°C ± 1°C or 28°C ± 1°C
NF Validation by AFNOR Certification	All Human Food Products, Animal Feed and Environmental Products (Primary Production Samples Excepted) 60–72h at 25°C ± 1°C or 28°C ± 1°C
Incubation	Stacks of 40 or less
Optimum pH Range	Not Applicable
Recommended Counting Range	<150 CFU
Counting Area	30cm ²
Spreader Type	3M™ Petrifilm™ Flat Spreader

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RYM

Rapid Yeast and Mold Count Plate





Mold Count: 12 (after 48 hours)

Mold Characteristics: Large colonies, colonies have diffused edges, blue-green to variable upon prolonged incubation, colonies appear flat and colonies have a dark center with diffused edge.

RYM

Rapid Yeast and Mold Count Plate



Product Code	6475 (box of 50 units) 6477 (case of 500 units)
Method: AOAC® Official Method of Analysis SM	Select Foods 48–60h at 25°C ± 1°C or 28°C ± 1°C
NF Validation by AFNOR Certification	All Human Food Products, Animal Feed and Environmental Products (Primary Production Samples Excepted) 60–72h at 25°C ± 1°C or 28°C ± 1°C
Incubation	Stacks of 40 or less
Optimum pH Range	Not Applicable
Recommended Counting Range	<150 CFU
Counting Area	30cm ²
Spreader Type	3M™ Petrifilm™ Flat Spreader

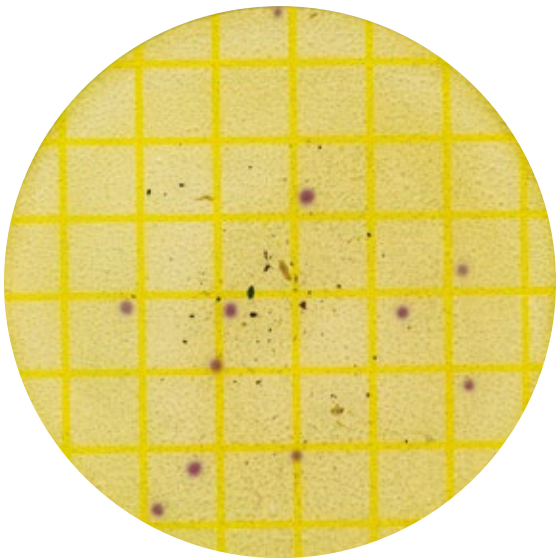
Visit the 3M Food Safety website at [3M.com/Petrifilm](https://www.3m.com/Petrifilm) for product information and product instructions which include information regarding validation recognition, scope and end of validity.

RYM

Rapid Yeast and Mold Count Plate



3M | Petrifilm™



***Listeria* Colony Count: 11**

EL

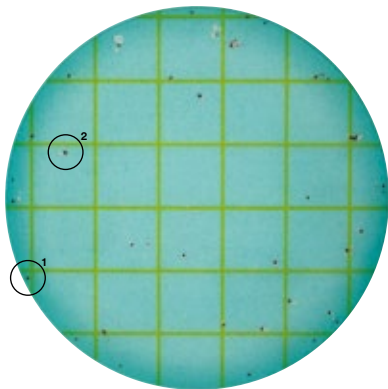
Environmental *Listeria* Plate

Product Code	6447 (box of 50 units) 6448 (box of 200 units)
Method: AOAC® Performance Tested Method	Add 2mL BPW to 1mL sample or 5mL BPW to 10mL of sample. Leave at room temperature for 1 to 1.5 hours. Plate 3mL and incubate: 28h ± 2h at 35°C ± 1°C or 37°C ± 1°C Do not exceed 30 hours incubation.
Incubation	Stacks of 10 or less
Optimum pH Range	4.0–9.0
Recommended Counting Range	Not Applicable
Counting Area	42cm ²
Spreader Type	3M™ Petrifilm™ Large Square Spreader (6498)

Visit the 3M Food Safety website at 3M.com/Petrifilm for product information and product instructions which include information regarding validation recognition, scope and end of validity.

EL

Environmental *Listeria* Plate



Total Lactic Acid Bacteria Count: 41

Circle 1: Homofermentative colony (non-gas producing).

Circle 2: Heterofermentative colony (gas producing).

LAB

Lactic Acid Bacteria Count Plate

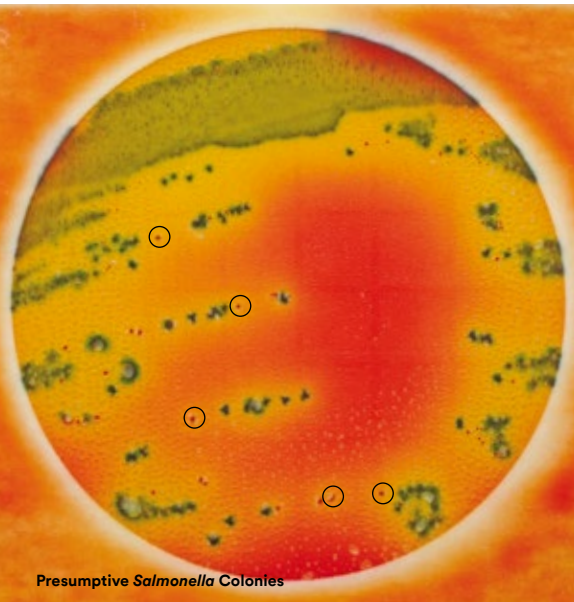
Product Code	6461 (box of 50 units) 6462 (case of 500 units)
Method: AOAC® Performance Method Tested™	Foods and Environmental Samples Incubate 48h ± 3h at appropriate temperature between 28–37°C
NF Validation by AFNOR Certification	Foods (Excluding Yogurts) and Industrial Environmental Samples 48h ± 3h at 30°C ± 1°C
Incubation	Stacks of 20 or less
Optimum pH Range	Not Applicable
Recommended Counting Range	Colonies Without Gas <300 CFU Colonies With and Without Gas <150 CFU
Counting Area	30cm ²
Spreader Type	3M™ Petrifilm™ Flat Spreader

Visit the 3M Food Safety website at 3M.com/Petrifilm for product information and product instructions which include information regarding validation recognition, scope and end of validity.

LAB

Lactic Acid Bacteria Count Plate

3M | Petrifilm™



Presumptive *Salmonella* Colonies

SALX

Salmonella Express Count Plate

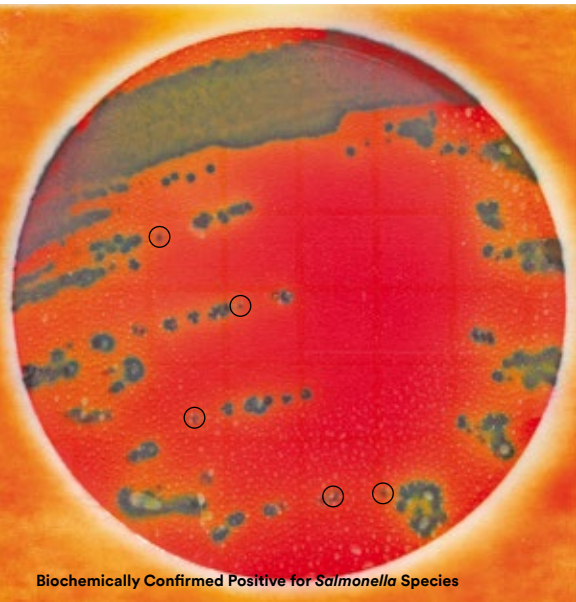
Product Code	6536 (box of 50 units) 6537 (case of 200 units)
Method	Combine sample with 3M <i>Salmonella</i> Enrichment Base (SEB500, SEB025) and 3M <i>Salmonella</i> Enrichment Supplement (SESUP001), incubate 18–24h. High Microbial Load Foods Transfer sample into Rappaport-Vassiliadis R10 (BPO288500) incubate 8–24h.
Hydration	Dispense 2mL of sterile Butterfield's Phosphate Diluent, distilled water or reverse osmosis water. Use spreader to distribute diluent and allow gel to form for 1h at room temperature before streaking onto plate.
Inoculation	Single streak enriched sample using a sterile 10 μ L (3mm diameter) loop.
Incubation	41.5°C \pm 1°C for 22–26h, stacks of 20 or less
Results	Qualitative (presence/absence); presumptive results.
Interpretation	Presumptive positive <i>Salmonella</i> is a red, dark red, brown colony with yellow zone or gas bubble or both. Circle presumptive positive colonies.
Spreader Type	3M™ Petrifilm™ Flat Spreader
Validation	AOAC® OMA 2014.01

Visit the 3M Food Safety website at 3M.com/Petrifilm for product information and product instructions which include information regarding validation recognition, scope and end of validity.

SALX

Salmonella Express Count Plate

3M | Petrifilm™



Biochemically Confirmed Positive for *Salmonella* Species

SALX (with Confirmation Disk)
Salmonella Express Count Plate

Product Code	<p>Plates 6536 (box of 50 units) 6537 (box of 200 units)</p> <p>Disks 6538 (box of 5 units) 6539 (box of 25 units)</p>
Method	<p>After circling presumptive positive colonies on top film of plate, add 3M™ Petrifilm™ <i>Salmonella</i> Express Confirmation Disk to the 3M™ Petrifilm™ <i>Salmonella</i> Express Count Plate.</p> <p>Incubate 4–5h.</p>
Incubation	41.5°C ± 1°C, stacks of 20 or less
Results	<p>Qualitative (presence/absence). Biochemical confirmation, is statistically equivalent to biochemical results of reference methods.</p> <p>Compares to standard method testing through biochemical confirmation, not equivalent to O&H serological results.</p>
Interpretation	Circled presumptive positive <i>Salmonella</i> colonies that are biochemically confirmed will turn green-blue, blue-dark blue, black or have a blue precipitate.
Validation	AOAC® OMA 2014.01

Visit the 3M Food Safety website at 3M.com/Petrifilm for product information and product instructions which include information regarding validation recognition, scope and end of validity.

SALX (with Confirmation Disk)
***Salmonella* Express Count Plate**

Shelf life and storage.

- 18 months (after manufactured date).
- Store **unopened** 3M™ Petrifilm™ Plate pouches refrigerated or frozen at temperatures lower than or equal to 8°C (46°F). For RAC, REC, RYM and LAB, store between -20°C to 8°C (-4°F to 46°F).
- After opening 3M Petrifilm Plate pouches, seal unused plates in pouch and store at room temperature in a cool dry place. Use plates within **four weeks** after opening.

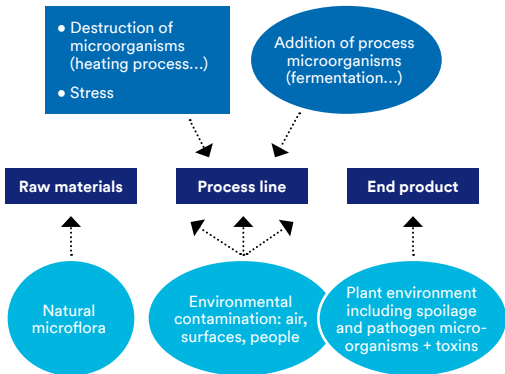
–OR–

- Store open pouches in a sealable container in the freezer.



Petrifilm™

Why perform environmental analysis?



Visit the 3M Food Safety website at 3M.com/Petrifilm for product information and product instructions which include information regarding validation recognition, scope and end of validity.

Environmental Analysis



Petrifilm™

Improve productivity. Save time and effort.

3M™ Petrifilm™ Plate Reader Advanced

- Plate enumeration in 6 seconds or less—up to 900 plates per hour.
- Achieve up to 94% reduced time to enumerate 3M™ Petrifilm™ Plates.*
- Enumeration for 10 of the 3M Petrifilm Plates, including the complete Rapid Plate portfolio, plus the 3M Petrifilm Staph Express Disk.

* Observed on the 3M™ Petrifilm™ Aerobic Count Plate with High Counts.

Plate Reader



Proficient software technology.

- On-board fixed artificial intelligence (AI) networks trained with a wide assortment of foods.
- Create individual testing profiles for different food matrices.
- Reads 10 barcode symbologies.

Proactive reporting.

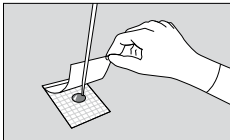
- View, trend, and track test data on this fully customizable dashboard for actionable Insights.





Petrifilm™

Preparation for surface direct contact and air sampling.



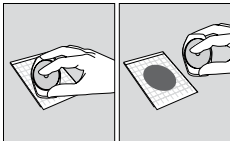
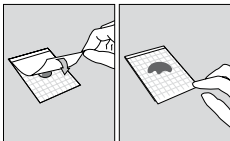
Hydration procedure:

Place 3M™ Petrifilm™ Plate on a **level surface**. Place 1 mL hydration diluent onto the center of the bottom film.

Carefully **roll** top film down so that it contacts hydration diluent and then drop the top film.

Gently apply pressure on spreader to distribute hydration diluent over circular area before gel is formed.

Keep plates closed for a minimum of **one hour** before use.



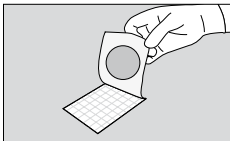
Reminders For Use

Preparation — Hydration Procedure

3M

| Petrifilm™

Surface sampling method.



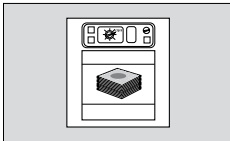
Direct contact procedure:

Prior to use, hydrate the 3M™ Petrifilm™ Plate. Carefully lift top film. Gel will adhere to top film.



Allow the circular gel portion of the top film to contact the surface being tested.

Lift film from surface and rejoin the top and bottom sheets of 3M™ Petrifilm™ Plates.



Incubate.

Visit the 3M Food Safety website at 3M.com/Petrifilm for product information and product instructions which include information regarding validation recognition, scope and end of validity.

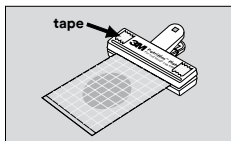
Reminders For Use

Surface Sampling Method — Direct Contact

3M

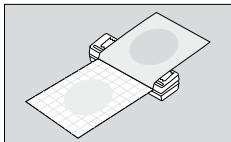
| Petrifilm™

Air sampling method.



Prior to use, hydrate the 3M™ Petrifilm™ Plate with sterile buffer.

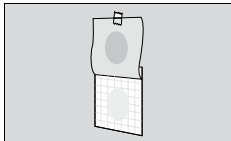
Position hinged edge of 3M™ Petrifilm™ Plate into 3M™ Petrifilm™ Plate Clip.



Open the 3M™ Petrifilm™ Plate and expose it to air no longer than 15 minutes. Use either double-stick tape or clip to keep plate open.

Close plate and incubate as defined by test.

Vertical position option:



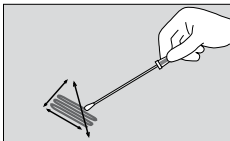
Reminders For Use

Air Sampling Method

3M

| Petrifilm™

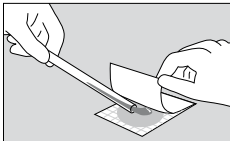
Surface sampling method.



Swab procedure:

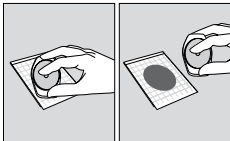
Swab according to the usual method.

Use a sterile diluent compatible with 3M™ Petrifilm™ Plates.



Pour 1 mL or pipette 1 mL of sample onto the center of the bottom film.

Gently apply pressure on spreader to distribute inoculum over circular area before gel is formed.



Use spreader to distribute sample.

Visit the 3M Food Safety website at 3M.com/Petrifilm for product information and product instructions which include information regarding validation recognition, scope and end of validity.

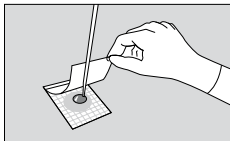
Reminders For Use

Surface Sampling Method — Swab

3M

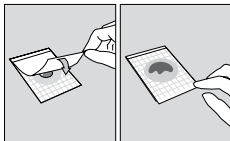
| Petrifilm™

Inoculation or hydration steps for bottled water testing.*

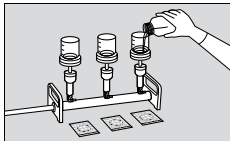


Place 3M™ Petrifilm™ Plate on a **level surface**. Place 1mL of sample or hydration diluent.

Carefully **roll** top film so that it contacts the sample or hydration diluent and then drop the top film.



Following standard procedures for water analysis, membrane filter water sample using a 47mm, **0.45 micron pore size Mixed Cellulose Ester (MCE)** filter.



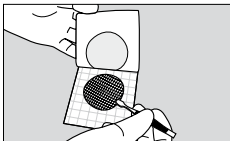
* This applies for AQCC, CC, EB & YM Plates according with the guidelines for this application.

Reminders For Use

Inoculation or Hydration Steps

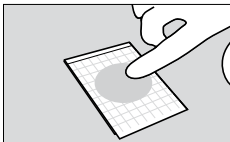


Inoculation or hydration steps for bottled water testing. (cont.)



Place filter in the center of bottom film.

Lightly apply pressure to ensure uniform contact of the filter with the gel and to eliminate any air bubbles. Use spreader when recommended.



Visit the 3M Food Safety website at 3M.com/Petrifilm for product information and product instructions which include information regarding validation recognition, scope and end of validity.

Reminders For Use

Inoculation or Hydration Steps



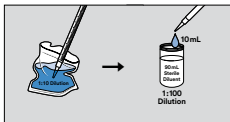


Petrifilm™

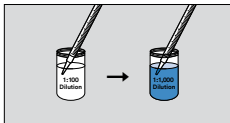
Making multiple dilutions.



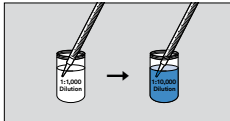
- 1** Prepare a 1:10 dilution of food sample.



- 2** Make a 1:100 dilution: Transfer 10 mL of the 1:10 sample to 90 mL of sterile diluent. Alternative volumes can be used as long as the ratio is maintained.*



- 3** Make a 1:1,000 dilution: With a new tip or pipette, transfer 10 mL of the 1:100 sample to 90 mL of sterile diluent.

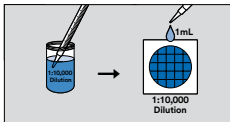


- 4** Make a 1:10,000 dilution: With a new tip or pipette, transfer 10 mL of the 1:1,000 sample to 90 mL of sterile diluent.

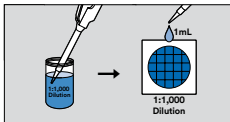
Reminders For Use

Making Multiple Dilutions

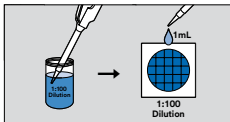
Making multiple dilutions. (cont.)



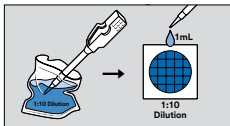
- 5 First plate 1:10,000 dilution:** Using a new tip or pipette, draw up 1 mL of the 1:10,000 dilution. Dispense the 1 mL sample onto the 3M Petrifilm Plate.



- 6 Plate the 1:1,000 dilution:** Using the same** tip or pipette, draw up 1 mL of the 1:1000 dilution. Dispense the 1 mL sample onto the 3M Petrifilm Plate.



- 7 Plate the 1:100 dilution:** Using the same tip or pipette, draw up 1 mL of the 1:100 dilution. Dispense the 1 mL sample onto the 3M Petrifilm Plate.



- 8 Plate the 1:10 dilution:** Using the same tip or pipette, draw up 1 mL of the 1:10 dilution. Dispense the 1 mL sample onto the 3M Petrifilm Plate.

* Transfer 1^*V to 9^*V of sterile diluent, where V is the volume of the sample.

** The same tip can be used when plating from the most dilute sample to the least dilute. If plating from least dilute to most dilute a new tip should be used for each plate.

Visit the 3M Food Safety website at 3M.com/Petrifilm for product information and product instructions which include information regarding validation recognition, scope and end of validity.

Reminders For Use

Making Multiple Dilutions



Petrifilm™

Determining CFU counts per gram of sample.

Example 1: Single plate.



Count: 3

1 mL plated of 1:10 dilution.

$$\begin{array}{ccccccc} \boxed{3} & \times & \boxed{10} & \div & \boxed{1} & = & \boxed{30} \\ \text{Count} & & \text{Dilution} & & \text{mL} & & \text{CFU/g} \\ & & \text{Factor} & & \text{Plated} & & \text{Reported} \end{array}$$

Example 2: Multiple plates in order to achieve higher sensitivity.



(2)



(1)

Total Count: 3

1 mL each plated of 1:10 dilution
on two plates equals 2 mL total.

$$\begin{array}{ccccccc} \boxed{3} & \times & \boxed{10} & \div & \boxed{2} & = & \boxed{15} \\ \text{Count} & & \text{Dilution} & & \text{mL} & & \text{CFU/g} \\ & & \text{Factor} & & \text{Plated} & & \text{Reported} \end{array}$$

CFU Counts

Add appropriate quantity of sterile diluents as defined in 3M™ Petrifilm™ Plate Package Inserts. Do not use buffers containing citrate, bisulfite or thiosulfate; they can inhibit growth.

Method approval by private or public organizations (e.g., AOAC® INTERNATIONAL or AFNOR Certification) does not guarantee the performance of 3M™ Petrifilm™ Plates for any particular food product or process.



**3M Food Safety
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St. Paul, MN 55144-1000**

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3M.com/Petrifilm**

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