3M | Petrifilm™

6536/6537/6538/6539

Product Instructions

- EN *Salmonella* Express System
- FR Système *Salmonella* Express
- DE *Salmonella* Express System
- IT Sistema *Salmonella* Express
- ES Sistema *Salmonella* Express
- NL *Salmonella* Express Systeem
- SV *Salmonella* Express System
- DA *Salmonella* Express System
- NO *Salmonella* Express system
- FI *Salmonella* Express Järjestelmä
- PT Sistema *Salmonella* Express
- EL *Σαλμονέλλα* Εξπρές Σύστημα
- PL System do szybkiego wykrywania obecności bakterii *Salmonella*
- RU Система *Сальмонелла* Экспресс
- TR *Salmonella* Tanımlama Sistemi
- JA サルモネラエクスプレスシステム
- ZH 沙门氏菌快速系统
- TH ชุดทดสอบ *Salmonella* Express
- KO 살모넬라 익스프레스 시스템

SALX
Salmonella Express

RAPID

3M | Petrifilm™

Product Instructions

Salmonella Express System

Product Description and Intended Use

The 3M™ Petrifilm™ *Salmonella* Express (SALX) System is used for the rapid qualitative detection and biochemical confirmation of *Salmonella* species in enriched food and food process environmental samples. The 3M Petrifilm SALX System consists of the 3M™ *Salmonella* Enrichment Base, the 3M™ *Salmonella* Enrichment Supplement, the 3M™ Petrifilm™ *Salmonella* Express (SALX) Plate, and the 3M™ Petrifilm™ *Salmonella* Express (SALX) Confirmation Disk, which are all packaged separately.

The 3M Petrifilm SALX Plate is a sample ready-to-use chromogenic culture medium system that contains a cold-water-soluble gelling agent and is selective and differential for *Salmonella*, providing a presumptive result. The 3M Petrifilm SALX Confirmation Disk contains a biochemical substrate that facilitates the biochemical confirmation of *Salmonella* organisms.

The 3M Petrifilm SALX Plate is used with or without the 3M Petrifilm SALX Confirmation Disk. The 3M Petrifilm SALX Confirmation Disk may be used only in conjunction with the 3M Petrifilm SALX Plate.

The 3M Petrifilm SALX System is intended for use in a laboratory environment by professionals trained in laboratory techniques. 3M has not documented the use of this product in industries other than food. For example, 3M has not documented this product for testing water, pharmaceutical, cosmetic, clinical or veterinary samples. The 3M Petrifilm SALX System has not been evaluated with all possible food products, food processes and food processing environments, testing protocols or with all possible strains of bacteria and may not detect all *Salmonella* strains. 3M has not validated the 3M Petrifilm SALX System using composite samples.

As with all test methods, the enrichment medium formulation can influence the results. The 3M Petrifilm SALX Plate has only been evaluated for use with the 3M *Salmonella* Enrichment Base, the 3M *Salmonella* Enrichment Supplement, and Rappaport-Vassiliadis R10 (R-V R10) Broth (typical formulation of R-V R10 broth follows below):

Typical Formula

Magnesium chloride (anhydrous)	13.4 grams
Sodium chloride	7.2 grams
Casein peptone	4.54 grams
Monopotassium phosphate	1.45 grams
Malachite green	0.036 grams
Demineralized water	1000.0 mL

pH 5.1 ± 0.2 @ 25°C

Adjust pH as required to meet performance standards.

3M Petrifilm SALX Plate and 3M Petrifilm SALX Confirmation Disk components are decontaminated though not sterilized. 3M Food Safety is certified to International Organization for Standardization (ISO) 9001 for design and manufacturing. 3M Petrifilm SALX Plate and 3M Petrifilm SALX Confirmation Disk have not been evaluated with all possible food products, food processes, testing protocols or with all possible microorganism strains.

Safety

The user should read, understand, and follow all safety information in the instructions for the 3M Petrifilm SALX System. Retain the safety instructions for future reference.

⚠ **WARNING:** Indicates a hazardous situation, which, if not avoided, could result in death or serious injury and/or property damage.

⚠ **NOTICE:** Indicates a potentially hazardous situation, which, if not avoided, could result in property damage.

⚠ WARNING

Do not use the 3M Petrifilm SALX System in the diagnosis of conditions in humans or animals.

3M Petrifilm SALX System will not specifically differentiate some lactose positive *Salmonella* sp. (primarily *S. arizonae* and *S. diarizonae)* from other lactose positive organisms. Lactose positive *Salmonella* strains will appear as non-*Salmonella* (blue colonies, green colonies, blue to green colonies, and/or black colonies with or without a yellow zone and/or associated gas bubble). It has been stated that these strains account for less than 1% of the total *Salmonella* serotypes[1].

The user must train its personnel in current proper testing techniques: for example, Good Laboratory Practices[2] or ISO 17025[3] or ISO 7218[4].

To reduce the risks associated with a false negative result leading to the release of contaminated product and/or the possibility of false positive results requiring a retest:

- Upon each plate use, verify hydrated 3M Petrifilm *Salmonella* Express Plate for any gel discoloration.
- Do not use 3M Petrifilm *Salmonella* Express Plate that show discoloration.
- Always use the 3M Petrifilm SALX System before the expiration date.
- Use the 3M Petrifilm SALX System with food samples and food process environmental samples that have been validated either by the user or by a third party.
- Use the 3M Petrifilm SALX System only with surfaces, neutralizing buffers, and protocols that have been validated either by the user or by a third party.
- Store the 3M Petrifilm SALX System as indicated on the package and in the product instructions.
- Follow the procedures and perform the tests exactly as stated in the product instructions.
- **Always use a permanent, ultra fine tip marker** to circle the characteristic presumptive *Salmonella* colonies on the top film before placing the 3M Petrifilm SALX Confirmation Disk onto the gel.

To reduce the risks associated with exposure to chemicals and biohazards:

- Perform pathogen testing in a properly equipped laboratory under the control of trained personnel.
- Always follow standard good laboratory safety practices (GLP)[2], including proper containment procedures, wearing appropriate protective apparel and eye protection while handling testing materials and test samples.
- Avoid direct contact with the contents of the enrichment medium and inoculated plates.
- Dispose of enrichment media and inoculated plates according to all applicable government, regulatory regulations and applicable laboratory procedures.
- Wear appropriate protective apparel while handling the 3M Petrifilm SALX Plate as some of the components may be considered allergenic and irritants to some individuals.

To reduce the risks associated with environmental contamination:

- Follow current industry standards and local regulations for disposal of contaminated waste.

NOTICE

3M Petrifilm SALX System does not differentiate any one *Salmonella* strain from another.
Consult the Safety Data Sheet for additional information.

For information on documentation of product performance, visit our website at www.3M.com/foodsafety or contact your local 3M representative or distributor.

User Responsibility

Users are responsible for familiarizing themselves with product instructions and information. Visit our website at **www.3M.com/foodsafety**, or contact your local 3M representative or distributor for more information.

When selecting a test method, it is important to recognize that external factors such as sampling methods, testing protocols, sample preparation, handling, and laboratory technique may influence results.

It is the user's responsibility in selecting any test method or product to evaluate a sufficient number of samples with the appropriate matrices and microbial challenges to satisfy the user that the chosen test method meets the user's criteria.

It is also the user's responsibility to determine that any test methods and results meet its customers' and suppliers' requirements.

As with any test method, results obtained from use of any 3M Food Safety product do not constitute a guarantee of the quality of the matrices or processes tested.

Limitation of Warranties / Limited Remedy

EXCEPT AS EXPRESSLY STATED IN A LIMITED WARRANTY SECTION OF INDIVIDUAL PRODUCT PACKAGING, 3M DISCLAIMS ALL EXPRESS AND IMPLIED WARRANTIES, INCLUDING BUT NOT LIMITED TO, ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE. If any 3M Food Safety Product is defective, 3M or its authorized distributor will, at its option, replace or refund the purchase price of the product. These are your exclusive remedies. You must promptly notify 3M within sixty days of discovery of any suspected defects in a product and return it to 3M. Please call Customer Service (1-800-328-1671 in the U.S.) or your official 3M Food Safety representative for a Returned Goods Authorization.

Limitation of 3M Liability

3M WILL NOT BE LIABLE FOR ANY LOSS OR DAMAGES, WHETHER DIRECT, INDIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES, INCLUDING BUT NOT LIMITED TO LOST PROFITS. In no event shall 3M's liability under any legal theory exceed the purchase price of the product alleged to be defective.

Storage

Plate storage

Upon receipt, store **unopened** 3M Petrifilm SALX Plate pouches at 2 to 8°C. They are sensitive to both moisture and light. Just prior to use, allow unopened pouches to come to room temperature (20 - 25°C / <60% RH) before opening. Return unused 3M Petrifilm SALX Plates to pouch. **To prevent exposure to moisture, store** opened 3M Petrifilm SALX Plate pouches in a sealed bag, protected from light, at -20 to -10°C for no longer than 4 weeks.

Confirmation Disk storage

3M Petrifilm SALX Confirmation Disks are individually packaged within a foil pouch. They are sensitive to both moisture and light. Store unopened pouches of 3M Petrifilm SALX Confirmation Disks at 2 to 8°C. Remove only those individually packaged 3M Petrifilm SALX Confirmation Disks that will be used immediately and store the remaining 3M Petrifilm SALX Confirmation Disks in the foil pouch by folding the end of the pouch over and applying adhesive tape. **To prevent exposure to moisture, do not refrigerate opened** 3M Petrifilm SALX Confirmation Disk **pouches.** Store resealed pouches in a cool (20-25°C) dry place (less than 60% RH) for no longer than 4 weeks or placed resealed pouches in a re-sealable storage bag and store at -20 to -10°C for no longer than 5 months.

Do not use 3M Petrifilm SALX Plates that show discoloration after hydration. Do not use 3M Petrifilm SALX Confirmation Disks that show discoloration. Expiration date and lot number are noted on each package of 3M Petrifilm SALX Plates and 3M Petrifilm SALX Confirmation Disks. The lot number is also noted on individual plates and on individual confirmation disk packages.

⚠ Disposal

After use, 3M Petrifilm SALX Plates and 3M Petrifilm SALX Confirmation Disks may contain microorganisms that may be a potential biohazard. Follow current industry standards and local regulations for disposal of contaminated waste. Consult the Safety Data Sheet for additional information.

Instructions for Use

Follow all instructions carefully. Failure to do so may lead to inaccurate results.

Wear appropriate protective apparel and follow standard good laboratory safety practices (GLP)[2].

Sample Enrichment

Foods

Tables 1 and 2 present guidance for test matrix samples. It is the user's responsibility to validate alternate sampling protocols (e.g., compositing) or dilution ratios to ensure this test method meets the user's criteria.

For Low Microbial Load Foods:

Low microbial load foods have a total aerobic colony count of ≤ 10^4 colony forming units/gram. Examples include: pasteurized, cooked, or processed foods.

1. Pre-warm 3M *Salmonella* Enrichment Base with the added 3M *Salmonella* Enrichment Supplement to 41.5 ± 1.0°C (see Tables 1 and 2).
2. Aseptically combine the enrichment medium and sample. For all meat and highly particulate samples, the use of stomacher filter bags is recommended. Homogenize thoroughly for 2 minutes. Incubate at 41.5 ± 1.0°C for 18-24 hours (see Tables 1 and 2).

For High Microbial Load Foods:

High microbial load foods have a total aerobic colony count of > 10^4 colony forming units/gram and require the use of Rappaport-Vassiliadis R10 (R-V R10) Broth. Examples include: raw, unprocessed foods.

1. Pre-warm 3M *Salmonella* Enrichment Base with the added 3M *Salmonella* Enrichment Supplement to 41.5 ± 1.0°C (see Tables 1 and 2).
2. Aseptically combine the enrichment medium and sample. For all meat and highly particulate samples, the use of stomacher filter bags is recommended. Homogenize thoroughly for 2 minutes. Incubate at 41.5 ± 1.0°C for 18-24 hours (see Tables 1 and 2).
3. After primary enrichment incubation, transfer 0.1 mL of the primary enrichment into 10.0 mL Rappaport-Vassiliadis R10 (R-V R10) Broth. Incubate at 41.5 ± 1.0°C for 8-24 hours.

Environmental samples

For sample collection, use a biocide-free cellulose sponge hydrated with Dey-Engley (D/E) Neutralizing Broth. Following user established procedures, remove any remaining D/E Neutralizing Broth residue from the sampled surface.

The recommended size of the sampling area to verify the presence or absence of the pathogen on the surface is 100 cm^2 (10 cm x 10 cm or 4 in. x 4 in.)[5]. When sampling with a sponge, cover the entire area going in two directions (left to right then up and down).

1. Pre-warm 3M *Salmonella* Enrichment Base with the added 3M *Salmonella* Enrichment Supplement to 41.5 ± 1.0°C (see Tables 1 and 2).
2. Aseptically combine the enrichment medium and sample. Mix thoroughly. Incubate at 41.5 ± 1.0°C for 18-24 hours.
3. If the environmental sample has a high microbial load (total aerobic colony count of > 10^4 colony forming units/sample), then after primary enrichment incubation, transfer 0.1 mL of the primary enrichment into 10.0 mL Rappaport-Vassiliadis R10 (R-V R10) Broth. Incubate at 41.5 ± 1.0°C for 8-24 hours.
4. If the environmental sample has a low microbial load (total aerobic colony count of ≤ 10^4 colony forming units/sample), then step 3 can be skipped.

AOAC® *Official Method of Analysis*℠ (OMA) 2014.01
AOAC® *Performance Tested*℠ (PTM) Certificate #061301

PERFORMANCE TESTED
AOAC
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LICENSE NUMBER 061301

In AOAC Research Institute OMA℠ and PTM℠ studies, the 3M Petrifilm SALX System was found to be an effective method for the detection of *Salmonella*. The matrices tested in these studies are shown in Table 1. The limit of detection of the 3M Petrifilm SALX System method is 1-5 colony forming units per validated test portion size (in Table 1).

Table 1: Sample Enrichment Protocols according to AOAC *OMA*℠ 2014.01 and AOAC *PTM*℠ Certificate #061301

Test Matrix	High Microbial Load	Sample Size	Primary Enrichment			Secondary Enrichment		
			Enrichment Volume (mL)	Temperature (±1.0°C)	Enrichment Time (hour)	Enrichment Medium	Temperature (±1.0°C)	Enrichment Time (hour)
Raw ground beef, raw ground pork, raw ground chicken	✓	25 g	225	41.5	18-24	R-V R10 Broth: 0.1 mL into 10.0 mL	41.5	8-24
Frozen, uncooked shrimp	✓	25 g	225			R-V R10 Broth: 0.1 mL into 10.0 mL	41.5	8-24
Pasteurized liquid whole egg		100 g	900			Not required for low microbial load foods.		
Dry dog food		375 g	3375			Not required for low microbial load foods.		
Fresh, bunched spinach	✓	25 g	225			R-V R10 Broth: 0.1 mL into 10.0 mL	41.5	24
Environmental – stainless steel surface (100 cm^2 sample size)		1 Sponge	225			Not required for low microbial load samples.		
Cooked chicken nuggets		25 g	225					

For other matrices:

Table 2: Sample Enrichment Protocols

<table>
<tr><th rowspan="2">Test Matrix</th><th rowspan="2">High Microbial Load</th><th rowspan="2">Sample Size</th><th colspan="3">Primary Enrichment</th><th colspan="3">Secondary Enrichment</th></tr>
<tr><th>Enrichment Volume (mL)</th><th>Temperature (±1.0°C)</th><th>Enrichment Time (hour)</th><th>Enrichment Medium</th><th>Temperature (±1.0°C)</th><th>Enrichment Time (hour)</th></tr>
<tr><td>Foods: Raw Meat, Poultry, Seafood and Fish</td><td>✓</td><td>25 g</td><td>225</td><td rowspan="5">41.5</td><td rowspan="5">18-24</td><td>R-V R10 Broth: 0.1 mL into 10.0 mL</td><td>41.5</td><td>8-24</td></tr>
<tr><td>Animal Feed</td><td></td><td>375 g</td><td>3375</td><td colspan="3">Not required for low microbial load foods.</td></tr>
<tr><td>Foods: Produce</td><td>✓</td><td>25 g</td><td>225</td><td>R-V R10 Broth: 0.1 mL into 10.0 mL</td><td>41.5</td><td>8-24</td></tr>
<tr><td>Environ-mental</td><td>*</td><td>1 Sponge</td><td>225</td><td colspan="3" rowspan="2">Not required for low microbial load samples.</td></tr>
<tr><td>Other Foods</td><td>*</td><td colspan="3">Follow appropriate reference method for sample size and enrichment volume</td></tr>
</table>

***** Some environmental and other food samples may have a high microbial load and require the use of R-V R10 secondary enrichment.

Plate Hydration

1. Use prescribed sterile diluents to hydrate the 3M Petrifilm SALX Plates:

   Butterfield's Phosphate Diluent, distilled water, or reverse osmosis water.
2. Place the 3M Petrifilm SALX Plate on a flat, level surface (figure A).
3. Lift the top film and with the pipette perpendicular dispense 2.0 mL ± 0.1 mL of sterile diluent onto the center of bottom film (figure B). Do not close the top film before dispensing the entire 2.0 mL volume.
4. Gently roll down the top film onto the diluent to prevent trapping air bubbles (figure C).
5. Place the 3M™ Petrifilm™ Flat Spreader (Catalog #6425) on the center of the plate. Press gently on the center of the spreader to distribute the diluent evenly. Spread the diluent over the entire 3M Petrifilm SALX Plate growth area before the gel is formed. Do not slide the spreader across the film (figure D).
6. Remove the spreader and do not disturb the 3M Petrifilm SALX Plate for at least 1 minute.
7. Place 3M Petrifilm SALX Plate on a flat surface for at least 1 hour at room temperature (20-25°C / <60% RH), protected from light, to allow the gel to form. Hydrated 3M Petrifilm SALX Plates can be stored at room temperature (20-25°C / <60% RH) protected from light, for up to 8 hours before use. If hydrated 3M Petrifilm SALX Plates will not be used within 8 hours, store them in a sealed plastic bag. Protect 3M Petrifilm SALX Plates from light and store at -20 to -10°C for up to 5 days.
8. After 3M Petrifilm SALX Plates are removed from storage, allow them to warm to room temperature before use.

Plate Inoculation

1. Remove the enrichment medium from the incubator and agitate contents by hand.
2. Use a sterile 10 µL loop (3 mm diameter) to withdraw each sample. Use a smooth loop (one that does not have jagged edges and is not distorted) to prevent the gel surface from breaking.
3. Open the 3M Petrifilm SALX Plate and streak onto the gel (figure E). Perform a single streak to obtain isolated colonies (Figure 1).

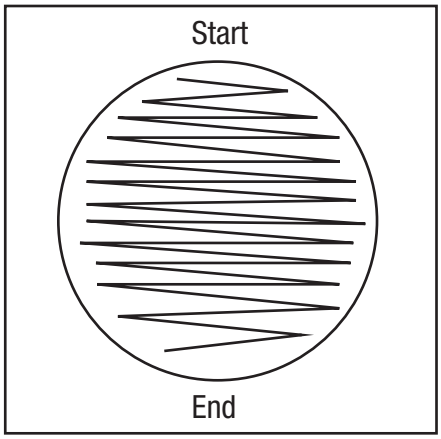

Figure 1: Streaking pattern on the 3M Petrifilm SALX Plate

4. Roll down the top film to close the 3M Petrifilm SALX Plate.
5. Using a gloved hand (while practicing good laboratory practices to avoid cross contamination and/or direct contact with the plate), gently apply a sweeping motion with even pressure onto the top film to remove any air bubbles in the inoculation area (figure F).

Plate Incubation

Incubate plates at 41.5 ± 1.0°C for 24 hours ± 2 hours in a horizontal position with the colored side up in stacks of no more than 20 plates.

Interpretation

1. Remove the 3M Petrifilm SALX Plates from the incubator and proceed with visually reading the results.
2. **Using indirect back lighting may enhance reading of colony color, discrete yellow zones, and gas bubbles associated with a colony**.
3. For interpretation, visually examine the isolated colonies. See Table 3. Do not count artifact bubbles that may be present.
4. Presumptive positive *Salmonella* species are red to brown colonies with a yellow zone or associated gas bubble, or both (figure G). An associated gas bubble is defined as being located within one colony diameter distance from the colony (see Table 3 below).

Table 3: Interpretation for Presumptive Positive *Salmonella* species

Colony Color			Colony Metabolism		Result
Red	Dark Red	Brown	Yellow zone	Gas bubble	
✓			✓		Presumptive +
✓				✓	Presumptive +
✓			✓	✓	Presumptive +
	✓		✓		Presumptive +
	✓			✓	Presumptive +
	✓		✓	✓	Presumptive +
		✓	✓		Presumptive +
		✓		✓	Presumptive +
		✓	✓	✓	Presumptive +

Non-*Salmonella* species (figure H):

- Blue colonies, green colonies, blue to green colonies, and/or black colonies with or without a yellow zone and/or associated gas bubble are non-*Salmonella* organisms.
- Red, dark red, and brown colonies with no yellow zone and no associated gas are non-*Salmonella* organisms.
- Red, dark red, and brown colonies with a magenta zone are non-*Salmonella* organisms.

If presumptive positive *Salmonella* colonies are not present, then *Salmonella* organisms were not detected in the matrix.

Presumptive *Salmonella* species:

If presumptive positive *Salmonella* colonies are present, then perform the following steps and continue to the Biochemical Confirmation step:

a. On the 3M Petrifilm SALX Plate top film, **circle a minimum of five isolated presumptive positive *Salmonella* colonies (if present) using a permanent, ultra fine tip marker** (figure I).

b. Biochemically confirm all *Salmonella* presumptive positive results using the 3M Petrifilm SALX Confirmation Disk. See the Biochemical Confirmation section.

c. If the 3M Petrifilm SALX Plates cannot be analyzed within 1 hour of removal from the incubator, **first circle the presumptive *Salmonella colonies* on the top film by using a permanent, ultra fine tip marker** and then place the plates in a sealed plastic bag for later analysis. Protect 3M Petrifilm SALX Plates from light and store at -20 to -10°C for no longer than 72 hours. Allow plates to warm to room temperature (20-25°C / <60% RH) before adding the disk to the plate.

⚠ **WARNING:** To reduce the risks associated with a false-negative result leading to the release of contaminated product and the possibility of false positive results requiring a retest, always use a permanent, ultra fine tip marker to circle the characteristic presumptive *Salmonella* colonies on the top film of the 3M Petrifilm SALX Plate before appropriate storage of the plate and/or before placing the 3M Petrifilm SALX Confirmation Disk onto the gel.

Biochemical Confirmation

1. Perform good laboratory practices to avoid cross contamination and/or direct contact with the 3M Petrifilm SALX Plate and/or 3M Petrifilm SALX Confirmation Disk.
2. Remove an individually packaged 3M Petrifilm SALX Confirmation Disk from its pouch and allow it to come to room temperature (20-25°C / <60% RH). Then remove the 3M Petrifilm SALX Confirmation Disk from its individual package by peeling the package to expose the 3M Petrifilm SALX Confirmation Disk's tab, grasping the tab, and removing the 3M Petrifilm SALX Confirmation Disk.
3. Lift the top film (with the already circled presumptive *Salmonella* colonies) of the 3M Petrifilm SALX Plate and insert the 3M Petrifilm SALX Confirmation Disk by rolling it onto the gel to avoid entrapping air bubbles (figure J). Close the 3M Petrifilm SALX Plate.
4. Using a gloved hand, gently apply a sweeping motion with even pressure onto the top film to remove any air bubbles in the inoculation area and assure good contact between the gel and the 3M Petrifilm SALX Confirmation Disk (figure K).
5. Incubate the 3M Petrifilm SALX System (plate and disk) at 41.5 ± 1.0°C for 4 - 5 hours in a horizontal position, right side up, no higher than 20 plates.
6. Remove the 3M Petrifilm SALX System from the incubator and proceed with reading the results.
   Only read the circled presumptive *Salmonella* colonies (See Table 4):

Table 4: Interpretation of 3M Petrifilm SALX System:

Colony Color			Biochemical Confirmation Result
Green to Blue	Blue to Dark Blue	Black	
✓			Biochemically Confirmed +
	✓		Biochemically Confirmed +
		✓	Biochemically Confirmed +

Biochemically confirmed positive results:

- Colonies that are green to blue, blue to dark blue, or black or have a blue precipitate around them are biochemically confirmed positive for *Salmonella* species.

Biochemically confirmed negative results:

- Colonies that remain the same red, dark red or brown color without a blue precipitate are negative for *Salmonella* species.

7. Colonies may be subcultured for further identification. When subculturing, wear appropriate protective apparel and follow standard good laboratory safety practices (GLP)[2].
    a. Lift the top film and aseptically remove the colony either from the gel or the 3M Petrifilm SALX Confirmation Disk. If a 3M Petrifilm SALX Confirmation Disk is covering the gel, aseptically peel the disk away and then aseptically remove the colony from the gel.
    b. Streak the colony per appropriate reference method[6, 7, 8].
8. If the colonies cannot be subcultured within 1 hour of plate removal from the incubator, then store the 3M Petrifilm SALX Plates for later analysis by placing in a sealed plastic bag at -20 to -10°C for no longer than 72 hours in the dark. Allow 3M Petrifilm SALX Plates to warm to room temperature (20-25°C / <60% RH) before continuing subculturing for identification.
9. After the test is complete, dispose of the 3M Petrifilm SALX Plates and 3M Petrifilm SALX Confirmation Disks in accordance with current industry standards and/or local regulations.

For further information refer to the 3M™ Petrifilm™ *Salmonella* Express System "Interpretation Guide." If you have questions about specific applications or procedures, please visit our website at www.3M.com/foodsafety or contact your local 3M representative or distributor.

References

1. McDonough P.L, et al. (2000). Diagnostic and Public Health Dilemma of Lactose-Fermenting *Salmonella* enterica Serotype *Typhimurium* in Cattle in the Northeastern United States. J. Clin. Microbiol. 38:1221-1226.
2. U.S. Food and Drug Administration. Code of Federal Regulations, Title 21, Part 58. Good Laboratory Practice for Nonclinical Laboratory Studies.
3. ISO/IEC 17025:2017. General requirements for the competence of testing and calibration laboratories.
4. ISO 7218. Microbiology of food and animal feeding stuffs – General requirements and guidance for microbiological examinations.
5. ISO 18593:2004. Microbiology of food and animal feeding stuffs – Horizontal methods for sampling techniques from surfaces using contact plates and swabs.
6. US Food and Drug Administration Bacteriological Analytical Manual. Chapter 5 *Salmonella*.
7. US Department of Agriculture (USDA) Microbiology Laboratory Guidebook 4.09. Isolation and Identification of *Salmonella* from Meat, Poultry, Pasteurized Egg, and Siluriformes (Fish) Products and Carcass and Environmental Sponges.
8. ISO 6579-1:2017. Microbiology of the food chain – Horizontal method for the detection, enumeration and serotyping of *Salmonella* – Part 1: Detection of *Salmonella* spp.

Refer to the current versions of the standard methods listed above.

Explanation of Symbols

www.3M.com/foodsafety/symbols

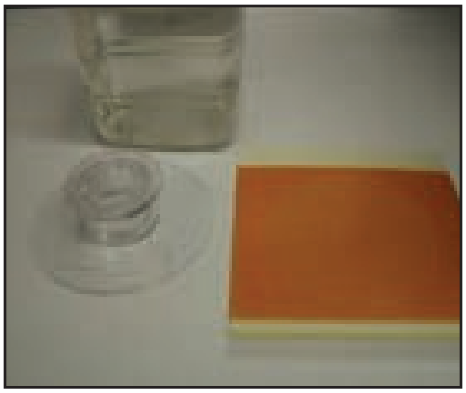

Figure A.

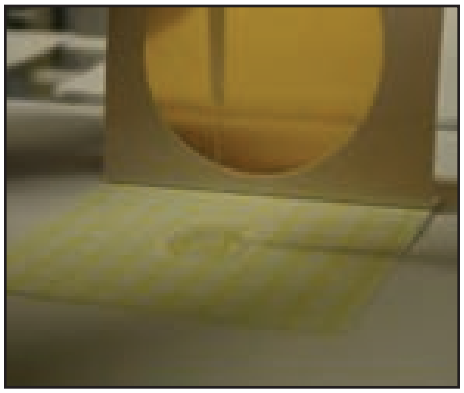

Figure B.

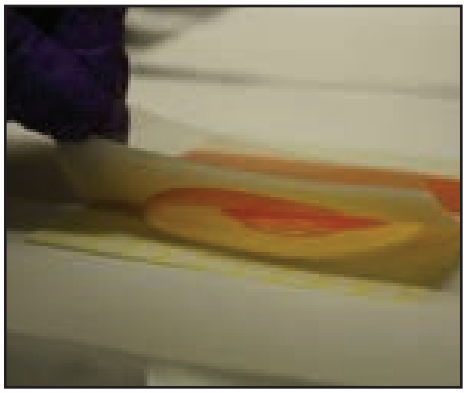

Figure C.

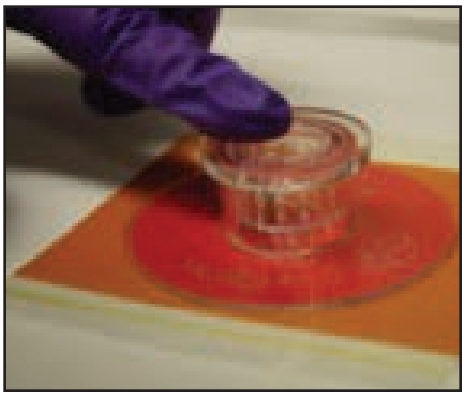

Figure D.

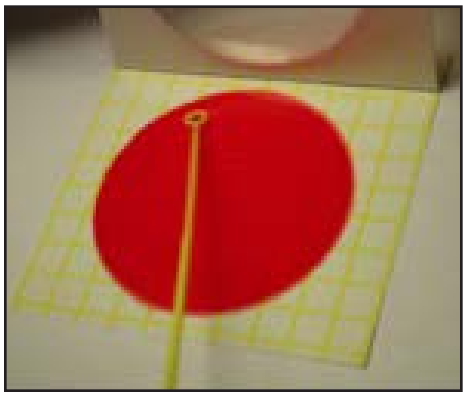

Figure E.

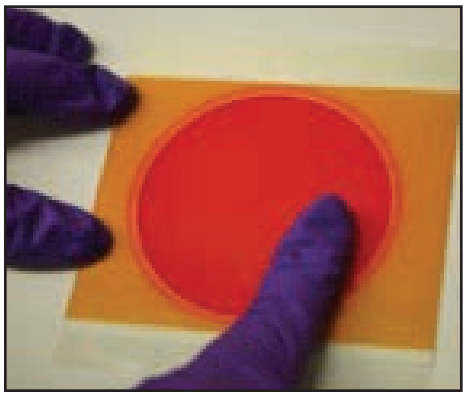

Figure F.

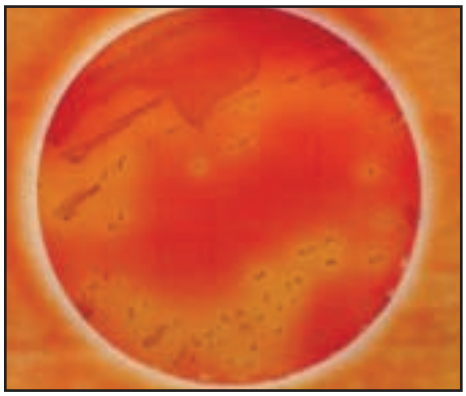

Figure G.

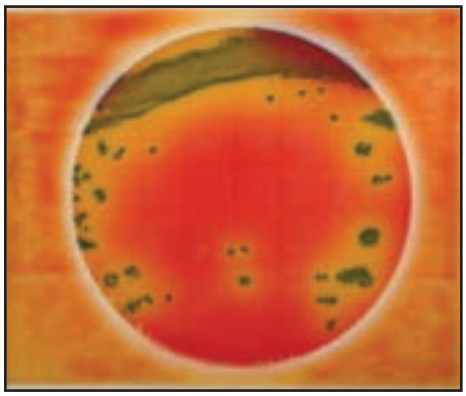

Figure H.

Figure I.

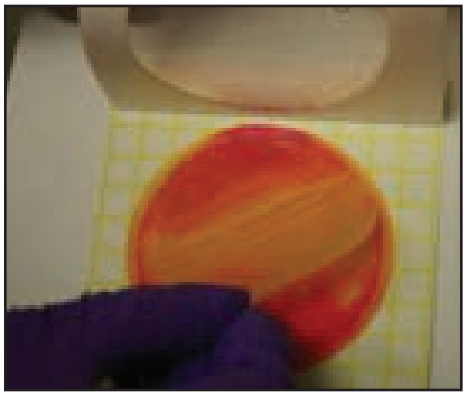

Figure J.

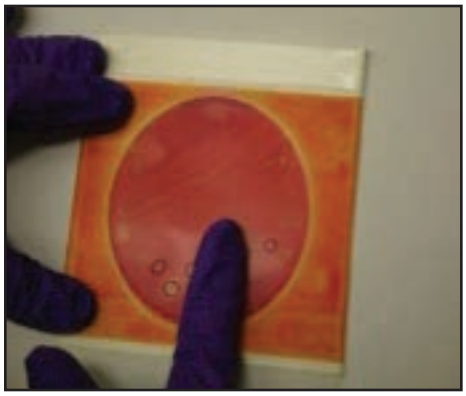

Figure K.

3M Food Safety

3M United States
3M Center
Bldg. 275-5W-05
St. Paul, MN 55144-1000
USA
1-800-328-6553

3M Canada
Post Office Box 5757
London, Ontario N6A 4T1
Canada
1-800-563-2921

3M Latin America
3M Center
Bldg. 275-5W-05
St. Paul, MN 55144-1000
USA
1-954-340-8263

3M Europe and MEA
3M Deutschland GmbH
Carl-Schurz-Strasse 1
D41453 Neuss/Germany
+49-2131-14-3000

3M United Kingdom PLC
Morley Street, Loughborough
Leicestershire
LE11 1EP
United Kingdom
+(44) 1509 611 611

3M Österreich GmbH
Euro Plaza
Gebaude J, A-1120 Wien
Kranichberggasse 4
Austria
+(43) 1 86 686-0

3M Asia Pacific
No 1, Yishun Avenue 7
Singapore, 768923
65-64508869

3M Japan
3M Health Care Limited
6-7-29, Kita-Shinagawa
Shinagawa-ku, Tokyo
141-8684 Japan
81-570-011-321

3M Australia
Bldg A, 1 Rivett Road
North Ryde, NSW 2113
Australia
61 1300 363 878

3M

3M Health Care
2510 Conway Ave
St. Paul, MN 55144 USA
www.3M.com/foodsafety

34-8722-5979-0