

3M *Micro Messenger*

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3M Microbiology Receives ISO 9001 Certification

As part of an ongoing commitment to customer satisfaction and quality, 3M Microbiology recently documented and standardized its quality management procedures to comply with ISO 9001 standards and has now received ISO 9001 certification.

Developed by the International Organization for Standardization, ISO 9000 guidelines have been adopted by tens of thousands of organizations in virtually every country. ISO certification was originally established in 1947 to promote the development of quality standardization and related activities in order to facilitate international trade.

International standards are used to improve the reliability and effectiveness of goods and services sold. With markets opening around the world, the importance of consistent, verifiable standards becomes more and more relevant.

“Although 3M Microbiology’s manufacturing plants have been ISO 9002 certified for many years, adding ISO 9001 certification documents our processes in vital areas such as product design and development,” said Katie Foran, Quality Assurance Manager, 3M Microbiology. “It is a necessary and essential part of our continued product and process improvement.”

ISO 9001 is a quality assurance model made up of 20 sets of quality system requirements. It covers all the steps necessary in designing, developing, manufacturing and servicing a product: from management responsibilities, quality system requirements, product design requirements, document and data control, process control and testing to handling, storage, delivery and training requirements.

“To the many customers who rely on 3M quality throughout the world, ISO 9001 certification means that the quality of our products and services is managed, controlled, and assured by a registered ISO quality system,” said Foran. “It shows that we understand our customers’ expectations and what it takes to meet them.”

As part of ISO certification, 3M Microbiology follows the 3M Corporate Quality Policy, which states: 3M will develop, produce and deliver on time, products and services that conform to customers’ expectations. These products and services must be useful, safe, reliable, environmentally acceptable, and represented truthfully in advertising, packaging and sales promotions.

ISO 9001 accreditation certifies that 3M Microbiology consistently follows and documents criteria and procedures to ensure materials, products, processes and services meet their requirements. In fact, many customers worldwide expect all of their suppliers to have ISO accreditation as a requirement for doing business.

“Having a quality system like ISO 9001 in place assures customers that we’re doing everything we can to provide consistent quality at every level. Quality systems make expectations clear for our employees which ultimately leads to satisfied customers,” added Foran. “With documented steps and procedures to follow, we will continue to develop

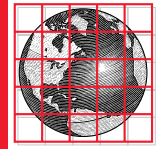


3M employees at the Brookings, South Dakota plant packing out 3M™ Petrifilm™ Plates.

new and innovative products that continue to meet customers’ changing needs. By thoroughly documenting procedures, training is more consistent and complete. For every employee there is a documented training plan and up-to-date training records.”

For 3M Microbiology customers, ISO 9001 accreditation provides confirmation by an outside, independent agency that systems are in place to ensure quality.

3M’s ISO 9001 certification signifies that it will continue to provide reliable products, proven design, development and manufacturing methods for the consistent quality you’ve come to expect. ISO 9001 certification is also an acknowledgment of 3M’s long-term commitment to create customer satisfaction around the world.



Colombina S.A. Improves Lab Efficiency by using 3M™ Petrifilm™ Plates

Colombina S.A., a 100-year-old corporation with plants in Cacua, Bogota and Santander, is one of the most important Colombian food companies that processes chocolate bars, cookies and other bakery specialties. Most of its production is exported to countries in Central and South America.

“It’s been a year since we began using Petrifilm plates for ingredients, process and finished products testing. Now we are able to release products faster than traditional procedures; yeast and mold testing in three days, and mesophilic, coliforms and *E. coli* in 24 hours.”

Can you describe the process followed to implement Petrifilm plates in your plant?

“Side by side tests comparing traditional vs. Petrifilm plates were conducted during one month; at the end the results were compared, concluding that the method was equivalent to traditional methods, so we decided to adopt Petrifilm plates for finished product testing (80% of total samples).”

“The next step was to present the data to plant management; results obtained were analyzed, keeping in mind the fastest reading time and the benefits for the production area, so we had no problem getting approval for our proposal.”

What changes have taken place in the lab after Petrifilm plates?

“Before Petrifilm plates, we used to follow traditional procedures and media preparation; sterilization steps were labor intensive due to our volume of samples requiring testing each day. Once we shifted to Petrifilm plates, we were able to allocate labor time that is being used in good manufacturing practices, training and occupational health programs.”

Colombina improved efficiency not only in the lab, but in other processes that are helping them to become more competitive.

One of the key contributing factors to the business’ success is the manufacture of high quality products that are carefully checked. Following is an interview with Dr. Claudia Yaneth Mancera, “Plant II Bogota” Lab Chef, Colombina, S.A.

What has been a key factor for Colombina’s success?

“Colombina has decided to get more and more business from the international market, so they have put special efforts into complying with the highest quality assurance standards, like ISO. Colombina Plant I Cacua is ISO 9000 certified.”

What sort of programs have been implemented?

“Plant I has implemented a “Good Manufacturing Practices” program, and because of the good results obtained there, we have decided to do the same at our new plant in Santander once operations start. Regarding HACCP, in Plant I, we have determined process critical control points that are maintained under standards through continuous monitoring.”

Regarding microbiological quality control, tell us why you decided to try the 3M Petrifilm plate procedure.

“Based on our current workload, and number of samples that needed to be analyzed on a daily basis, we started to run some trials with Petrifilm plates. During this process we determined that one of the major benefits was that it helped us improve our inventory management.”



Canada and U.S. Customer Service Reps Are Here to Help

To continue our efforts for superior customer service, we've assigned territories for each of our Customer Service Representatives in Canada and the U.S. Incoming calls for the U.S. are routed by area code, so your call will go directly to your representative; should your representative be unavailable,

your call will be directed to the first available agent. By establishing these territories within Customer Service, we want to provide you with an even stronger working relationship with your representative whenever needs or questions arise.



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Shelf Life News

Based on recent real-time test results, the shelf life of both 3M™ Petrifilm™ Enterobacteriaceae Count Plates and 3M™ Quick Swabs has now been extended to 18 months. These products now have the same shelf life as most of the Petrifilm plate family. All newly produced packages of these products will reflect this change.

3M™ Petrifilm™ Plate Approvals Update

AOAC Method 2000.15

Dry Rehydratable Film Method for the Rapid Enumeration of Coliform in Foods, 3M™ Petrifilm™ Rapid Coliform Count Plate (RCC).

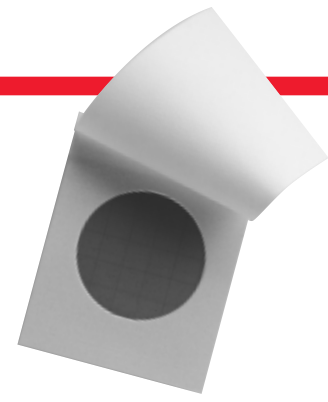
3M received AOAC Official Method status for the Petrifilm Rapid Coliform Count plate method. The Petrifilm RCC plate method is now the most rapid official AOAC test for coliform available, with presumptive results available in 14 hours and confirmed results in 14 and 24 hours.

The collaborative study report for RCC will be published in the *Journal of AOAC* within the next six to nine months.

AOAC Method 997.02

Yeast and Mold Counts in Foods, Dry Rehydratable Film Method, 3M™ Petrifilm™ Yeast and Mold Count Plate (YM).

3M received AOAC Official Method Final Action status for the Petrifilm Yeast and Mold Count Plate Method. The Petrifilm YM plate method became an official AOAC method in 1997. Since that time, The Petrifilm YM plate method has been widely accepted throughout the food industry as a reliable method. Therefore, "Final Action" status has been granted by AOAC INTERNATIONAL.



3M™ Petrifilm™ Rapid *S. aureus* Count Plates

Q&A

1. Why are my counts on Petrifilm Rapid *S. aureus* Count plates (RSA) higher than the counts on Baird-Parker agar?

There could be a number of reasons for this difference. Petrifilm RSA plates identify and confirm all of the colonies on the plate; on Baird-Parker agar plates only a representative number of colonies are picked and confirmed. Only about 70% of *S. aureus* show as typical colonies on Baird-Parker agar. If Baird-Parker agar plates are more than a few days old, they will not recover at the rate that fresh plates will.

2. Do I have to use forceps to insert the blue disk, and a bent-glass rod to establish contact with the gel?

You may also use a clean, gloved hand to both insert the blue disk and to establish contact with the gel.

3. Can I stop the testing process by freezing the plate and then finish testing the next day?

Yes, after the 24-hour incubation step (first incubation) the plates can be placed in a sealed container and frozen. When testing is to be resumed, thaw the plates and continue with the 62°C incubation step, then insert the Thermostable Nuclease (TNase) reactive disk,

and continue with final incubation at 35°C.

4. I pick the *S. aureus* colonies for further testing, but sometimes they are not viable. Is there anything that I can do to recover these colonies?

When doing the elevated incubation step (the second incubation at 62.5°C) do not incubate the plate for longer than 60 minutes. The longer the plates are incubated at 62.5°C, the higher the incidence of organisms not being viable. Another way to increase the ability to recover viable organisms, is to allow the Petrifilm plates to sit on the counter overnight at room temperature after the third incubation step and prior to picking. This may help resuscitate the stressed organisms.

5. How can I minimize gel splitting when adding the blue TNase disk?

After removing Petrifilm RSA plates from the 62°C incubator, allow the plates to cool on the counter for 5–10 minutes before inserting the TNase disks.

6. Can my testing be completed in less than 26 hours?

Yes, under certain conditions testing can be completed in 24 hours.

Incubate the plates for 22 hours (24.5 hrs.) at 35°C, then incubate the plates for 1 hr. at 62.5°C. Insert the TNase disk and incubate at 35°C for 1 hour.

- If there are no colonies present, the test is complete.
- If all of the colonies present have pink TNase zones, the test is complete.
- This allows you to complete the testing in 24 hours. (22 hrs. + 1 hr. + 1 hr. = 24 hrs.)

If there are colonies present that have TNase zones as well as colonies that do not have zones, the plates should be returned to the incubator for 2 additional hours (for a total of 3 hours) to allow any other TNase zones to appear. (For example: 22 hrs. + 1 hr. + 3 hrs. = 26 hrs.)

7. What other types of organisms besides *S. aureus* will grow on Petrifilm RSA plates?

Bacillus, *enterococci*, and other staph species will grow on Petrifilm RSA plates, but these will show as red or blue colonies without pink zones.

To order 3M Microbiology products in the U.S., call **1-800-328-1671**. Latin America/Africa and Asia Pacific regions, call **1-651-733-7562**.



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