3M<sup>™</sup> Petrifilm<sup>™</sup> Plates and Reader







## Simply efficient.

#### **Maximize productivity**

Plates are sample-ready, eliminating the time-consuming, cumbersome step of preparing agar dishes. Plus, plates such as the *E.coli*/Coliform Count and Staph Express Count plates go even further by eliminating the need for a subsequent confirmation step required with traditional agar methods. In a study conducted with 292 food-processing plants, companies increased their QA personnel efficiency by an average of 80.5%, saving an average of 3.7 hours per day of technician time by using 3M™ Petrifilm™ Plates.

#### Improve consistency

Compared to the variability associated with agar preparation, 3M's standardized formula improves consistency across technicians, shifts and plants — worldwide. Each lot of 3M Petrifilm Plates goes through rigorous quality testing at our ISO 9001 certified manufacturing facility. This reduces the need for lot qualifications in operations making their own agar. More than 200 evaluations from peer-review publications and validating agencies worldwide have confirmed the consistent results of 3M Petrifilm Plates.¹

#### Easy to use

The simplicity and ease of use of 3M Petrifilm Plates make it easy to train technicians. Now they can learn – and succeed – starting with their very first test.

#### Space saving

Space is at a premium in the laboratory environment. That's why 3M Petrifilm Plates are designed to be as compact and efficient as possible. The shelf-stable, thin design takes up 85% less space than agar dishes, freeing incubator and storage space and significantly reducing biohazardous waste.



### Simply productive.

#### Fast, easy-to-interpret results.

Each 3M™ Petrifilm™ Plate contains a water-soluble gelling agent, nutrients and indicators – all the components needed for microbial growth – with no preparation required.

#### Three simple steps to improved analysis with 3M Petrifilm Plates.



1. Inoculate 3M Petrifilm Plates are easily inoculated. No media preparation is required.

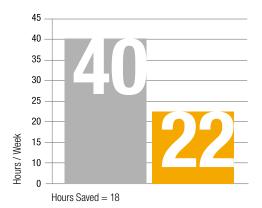


2. Incubate A compact incubator is all you need with 3M Petrifilm Plates.



3. Interpret Simply count the colonies. Indicator dyes facilitate interpretation.

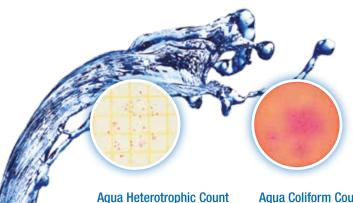
#### **Lab Technician Labor Hours**



In a study conducted with 292 food processing plants, the average number of technician hours needed for indicator testing was reduced from 40 hours per week for the traditional agar process, to 22 hours per week when implementing 3M Petrifilm



#### Easy, fast and accurate water testing compatible with membrane filtration.



#### An indicator dye colors colonies red. Count all red colonies regardless of size or color intensity. Membrane filtration or 1 mL direct plating. Results in 48 hours.



#### Aqua Enterobacteriaceae Count

An indicator dye in the plate colors colonies red. Count all colonies with yellow zones; gas bubbles; or yellow zones and gas bubbles. Results in 24 hours.

#### **Aqua Coliform Count**

An indicator dye in the plate colors colonies red and the top film traps gas produced by coliforms. Results in 24 hours.



#### Agua Yeast & Mold Count

An indicator dye in the plate colors yeast colonies blue-green. Mold colonies become variably colored. Results in 3 to 5 days.

## Simply comprehensive.

#### A plate for almost any kind of count.



#### **Aerobic Count**

An indicator dye in the plate colors all colonies red.
Results in 48-72 hours.



#### **Coliform Count**

An indicator dye in the plate colors coliform colonies red and the top film traps gas produced by colonies . Results in 24 hours.



#### E. coli/Coliform Count

An indicator dye in the plate colors *E. coli* colonies blue and coliform colonies red, while the top film traps gas.

Results in 24 hours for meat, poultry and seafood or 48 hours for all other foods



#### Select E.coli Count Plate

The indicator systems in the plate, allows the differentiation of *E.coli* strains from other organisms. The indicator system allows *E.coli* to appear as dark green to blue green colonies. Results in 24 hours.



#### **Enterobacteriaceae Count**

An indicator dye in the plate colors colonies red. Count red colonies with yellow zones, red colonies with gas bubbles and red colonies with yellow zones and gas bubbles.

Results in 24 hours.



#### Yeast & Mold Count

An indicator dye in the plate colors yeast colonies blue-green. Mold colonies become variably colored. Results in 5 days.



#### High-Sensitivity Coliform Count

Designed to accommodate 5 mL samples for sensitivities as high as 1 cfu/g. An indicator dye in the plate colors coliform colonies red and top film traps gas produced by colonies. Results in 24 hours.



#### **Rapid Coliform Count**

An indicator dye in the plate colors colonies red with yellow acid zones. Early coliform results within 6 to 14 hours. Final results in 14 to 24 hours.



#### Staph Express Count

An indicator dye in the plate typically colors *S. aureus* red-violet. Results in 24-28 hours.



#### **Environmental Listeria**

An indicator dye in the plate colors target Listeria colonies red-violet. Results in 28 hours.





#### **Rapid Yeast & Mold Count**

An indicator dye in the plate colors yeast colonies blue. Mold colonies become variably colored.

Results starting in just 48 hours.

## Simply efficient.

#### 3M<sup>™</sup> Petrifilm<sup>™</sup> Plate Reader Automated reading you can rely on.

This compact, desktop unit accurately reads and records plate counts, saving critical time to further improve your productivity. It processes the three most common plate tests: Aerobic Count, Coliform Count and *E.coli*/Coliform Count. The software stores data in a secure log file to enable 21 CFR Part 11 compliance, and exports data to spreadsheets or text files for importing to LIMS databases.

- Fast results in just four seconds per plate
- Eliminates variation between technicians
- Reduces the chance for human error
- Reads bar coded labels
- Improves data management
- Archives color images





### Tecnic Automated Plate Reader designed for 3M Petrifilm Plates

The Tecnic Automated Plate Reader is specifically designed to read 3M Petrifilm plates. As "walk-away-system" it fully automatic feeds stack of Petrifilm plates, reads automated and records all results. This can increase productivity and save costs by reducing labour intensive manual plate reading.

- Designed as »Walk-away-system«
- Automated read of plates and record of results
- Fully automated 3M Petrifilm plate feed
- Ability to read barcode labels to reduce transcription errors
- Compatible with LIMS system
- Sorted output



# Simply reputable.

#### Trusted by 91 of the top 100 U.S. food companies.<sup>2</sup> Validated around the world.

Make your processes more efficient and standardized by using the same products that top food companies around the globe are relying on today.

#### Precise, consistent results. More than 200 validating agencies and peer-review publications.3

NF validation by AFNOR certification in accordance with ISO 16140

AOAC® International — Official Methods of Analysis<sup>SM</sup>

AOAC® International - Research Institute<sup>SM</sup>



# Simply revolutionary.



#### The fascinating story behind the little red dot.

3M Petrifilm Plates began with one microbiologist's curiosity and collaboration with other scientists, which in turn led to new discoveries that evolved into the world's leading brand of food indicator testing. Learn more at www.3M.com/3MPetrifilmStory.

#### Connect the dots. End-to-end solutions.

With more than 30 years of global experience in the food and beverage industry, 3M Food Safety offers a full line of products that work together for consistent, reliable results.

Find out more at www.3M.com/foodsafety.



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