

Environmental Non-Enrichment Rapid Listeria Test



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Today's 15 minute agenda!

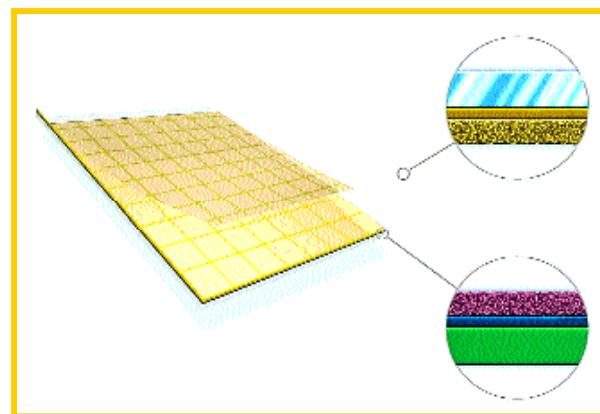


- Method Introduction
- Validations & Approvals
- Why and When use this method
- Questions ?

3M™ Petrifilm™ Environmental Listeria Plate

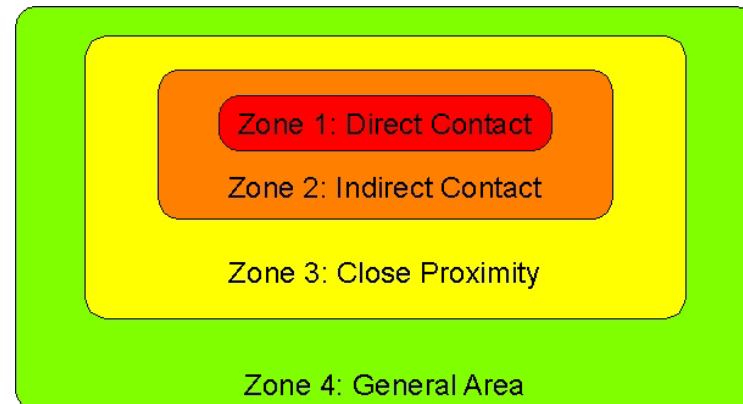


- Sample-ready culture medium
- Selective media
- Chromogenic indicator
- Detection and/or enumeration of environmental *Listeria*
- Uses a repair step, not enrichment step
- Results within 30h ± 2h from sample collection



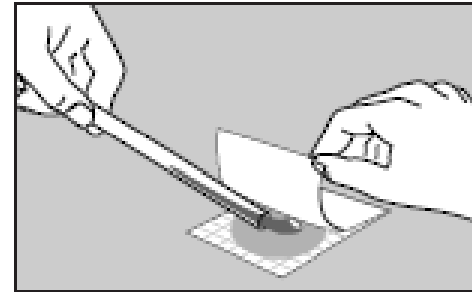
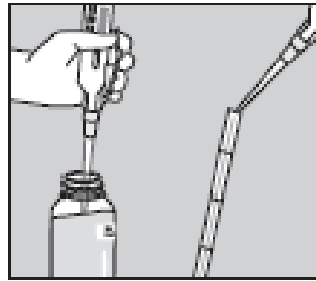
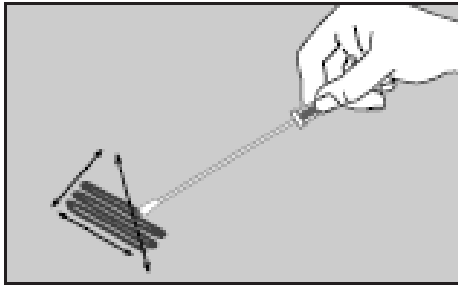
Validations and Approvals

- AOAC-RI Performance Tested, Certificate No. 030601
- MFLP-11 on Health Canada's Compendium of Analytical Methods
- Not included on CFIA new Listeria Policy for RTE Meat and Poultry for mandatory samples. Currently under further evaluation by Health Canada
- Not an enrichment method
- Tool for monitoring zones 2,3,4; non-food contact surfaces

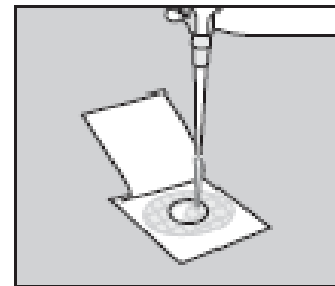
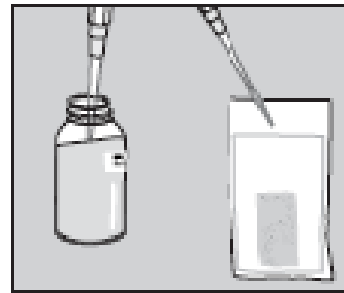
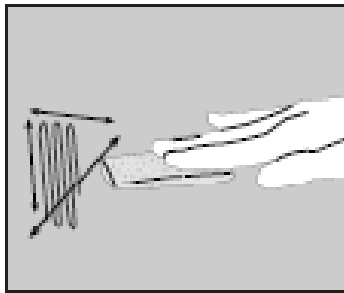


Sampling Methods

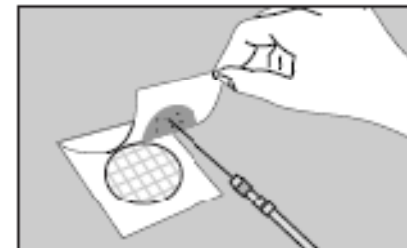
Quantitative: Use a swab and 2ml BPW for repair step



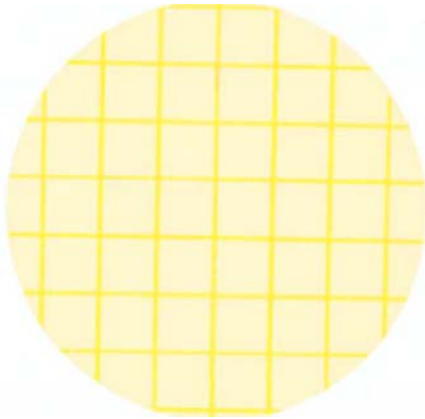
Semi-quantitative: Use a sponge and 5ml BPW for repair step



To confirm colony, lift top film, pick colony for enrichment



Method Protocol



Collect sample (sponge or swab)



Add buffered peptone water



Mix



Repair 1 to 1.5 h, then mix



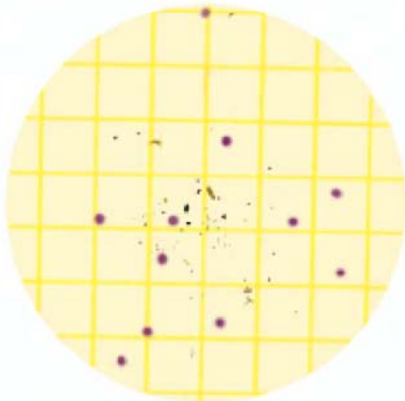
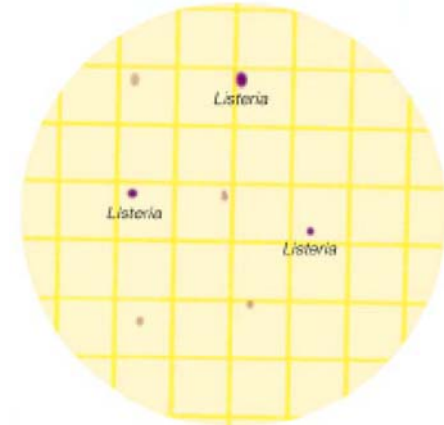
Plate 3 mL



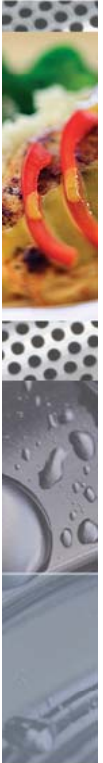
Incubate 28 ± 2 h



Observe for **red-violet** colonies



Indicator testing



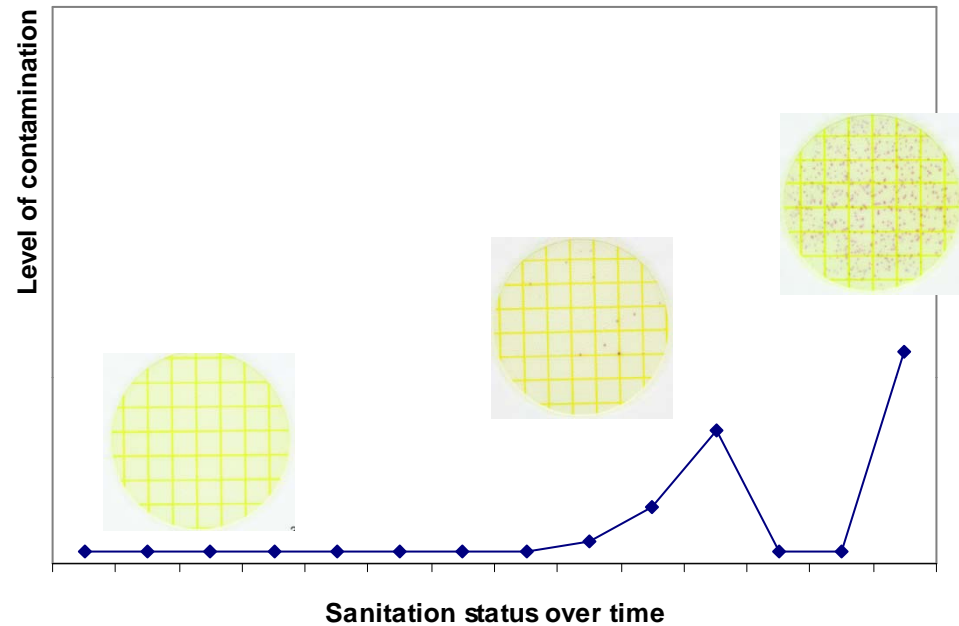
"*Listeria* spp. or Listeria-like organisms can be used as indicator organisms for the presence of *Listeria monocytogenes*. Indicators may indicate the potential presence of the pathogen"


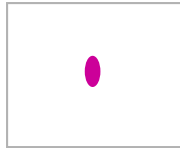
- 3M PEL detects the majority of environmental Listeria
L. monocytogenes, *L. innocua* and *L. welshimeri*
L. ivanovii, *L. grayi/murrayi* and *L. seeligeri* grow but don't form typical colonies
- Published literature from > 2,600 samples analyzed by various methods show:
 - ~ 98% of total Listeria-positive samples contained *L. mono.*, *L. innocua* and *L. welshimeri*
 - Only 2% of total Listeria-positive samples contained *L. grayi*, *L. ivanovii* and *L. seeligeri*



Non-enrichment, Quantitative method

Quantitative tests can facilitate

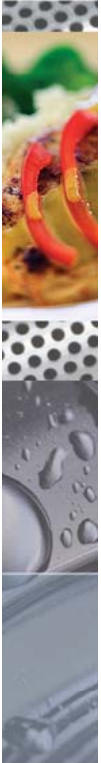
- Investigative work
- Data trending
- Surveillance of hot spots
- Zone testing



 ➔ 2mL repair broth (BPW), hold 1hr ➔  Quantitative result

 ➔ 225mL enrichment broth, incubate 24- 52h ➔  Qualitative result

Summary



- Method Introduction
- Validations & Approvals
- Why, When & How to use this method
- Questions ?
- See us at 3M booth for more information

Thank you !! Merci !!

Contact Information

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