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Nestlé Quality Assurance Center
Dublin

Technical Datasheet

Analysis Name: Enumeration of Coliform/*E. coli* Petrifilm™

Method Number: LI-00.738

Scope of Application: Raw materials, line samples and finished products.

Description: EC-Petrifilm™ is a method which is used for the enumeration of coliforms and *E. coli*. Its main feature is to combine the enumeration of both coliforms and *E. coli*. After incubation at 37°C for 24 hours coliforms (gas producing colonies) are enumerated and after an additional 24 hour incubation step *E.coli* is enumerated. The sensitivity is equal to ten *E. coli* and/or coliforms per g of food product (10 cfu/g). However, this method does not detect *E. coli* O157:H7.

Sample Weight Required: 25 g

Method Reference: ISO method 4831 and AOAC, BAM

Analytical Platform: 3M Petrifilm™

Special Information: Enumeration of coliforms or *E. coli* in chocolate and cocoa-based food matrices may not be feasible unless the sample is sufficiently diluted. This is due to a strong coloration of the Petrifilm™ surface area. Additionally, this test is not appropriate for high acid samples and spices.

Petrifilm™ is not applicable when enzymes like amylase or mannanase are used to improve dissolution of cereal, thickener or flour products, or if the sample contains Bacillus liquefying the gel in the Petrifilm™.

Analyte Reported	Alias	Unit of Measure	Limit of Quantification	Reproducibility
Coliform Result		CFU/g	<10/g	
Coliform Result (Environmental)		CFU/mL	<10 CFU/swab (q-tip/stick) <100 CFU/swab (sponge)	



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<i>E. coli</i> Result		CFU/g	<10/g	
<i>E. coli</i> Result (Environmental)		CFU/mL	<10 CFU/swab (q-tip/stick) <100 CFU/swab (sponge)	