

METHOD SUMMARY – QWI- FM0010

Method Title	AEROBIC PLATE COUNT - PETRIFILM		
Document number	QWI- FM0010	Date of Issued	17 th August 2016

Method External References	AOAC 990.12, AOAC 986.33, AOAC 989.10 AFNOR Validated Method 3M 01/01-09/89 3M Petrifilm Interpretation Guide – Aerobic Count Plates
Matrix	As listed on NATA Scope.
ALS Department	<input type="checkbox"/> Pharmaceutical Chemistry <input type="checkbox"/> Water Microbiology <input type="checkbox"/> Pharmaceutical Microbiology <input checked="" type="checkbox"/> Food Microbiology <input type="checkbox"/> Food Chemistry
Accreditation Status	<input checked="" type="checkbox"/> NATA <input type="checkbox"/> NON-NATA <input type="checkbox"/> N/A
Analysis technique	<input type="checkbox"/> HPLC <input type="checkbox"/> GC <input type="checkbox"/> Wet Chemistry <input type="checkbox"/> Physical <input type="checkbox"/> Gravimetric <input type="checkbox"/> Qualitative <input type="checkbox"/> Pour Plate <input type="checkbox"/> Spread Plate <input type="checkbox"/> MPN <input type="checkbox"/> Filtration <input checked="" type="checkbox"/> Petrifilm <input type="checkbox"/> EHS <input type="checkbox"/> ELISA <input type="checkbox"/> VIDAS UP <input type="checkbox"/> VIDAS <input type="checkbox"/> TEMPO
Method Principle	<p>This method describes a procedure for the enumeration of bacteria by using a diagnostic rapid method designed for the food and dairy industries including hygiene swabs.</p> <p>Petrifilm™ plates have not been tested with all possible food products, food processes testing protocols or with all possible strains of bacteria. This method is not recommended for testing water, pharmaceuticals or cosmetics.</p> <p>This method describes the procedure for testing Food Products and Dairy Products including raw and pasteurised milk, and Environmental samples (swabs) using 3M Petrifilm™ Aerobic Count Plates.</p> <p>Food samples must be processed rapidly in order to ensure optimum isolation due to its sensitivity to many environmental conditions.</p> <p>This method uses bacterial culture plates of dry medium and cold H₂O soluble gel. Diluted or undiluted test suspensions are added to the plate at a rate of 1.0 mL per plate. Pressure, when applied to the plastic spreader placed on overlay film, spreads test portions over 20 cm² growth area. The gelling agent is allowed to solidify and plates are incubated at 35 °C or 32 °C for 48 ± 3 hours (based on food matrix tested) and then counted.</p> <p>Petrifilm™ Aerobic Plate Count plates contain standard methods media nutrients, a cold water gelling agent onto film base, overlay film coated with gelling agent, and 2,3,5-triphenyl tetrazolium chloride indicator. Colonies stain in various shades of red.</p>



Reporting Unit	Aerobic Plate Count cfu per gram, per mL, per swab or CFU per cm ²
LOR/LOQ	<10

Minimum amount of sample required for analysis	10g	Turnaround time	48 hours
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Author:	Laboratory Manager, Microbiology VIC	Date:	
Authorised By:	National Quality Manager	Date	

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