

METHOD SUMMARY – QWI-FM0127

Method Title	Enterobacteriaceae Count in Poultry		
Document number	QWI-FM0127	Date Issued	11 th July 2016

Method External References	ISO 21528,2: 2004: Microbiology of food and animal feeding stuffs: Horizontal method for the detection and enumeration of Enterobacteriaceae – Part 2 Colony count		
	AS 5013.8 2004: Food microbiology - Meat and meat products - Detection and enumeration of Enterobacteriaceae without resuscitation MPN and Colony Count techniques		
	AS5013.11.1-2004: Food Microbiology - Microbiology of food and animal feeding stuffs – Preparation of test samples, initial suspension and decimal dilutions of microbiological examination – General rules for the preparation of the initial suspension and decimal dilution		
	AS 5013.14.1-2010: Food Microbiology - Microbiology of food and animal feeding stuffs - General rules for microbiological examinations (holding temperature of media in water bath)		
	AS 5013.20-2004: Food Microbiology – Preparation of test samples for microbiological examination – Poultry and poultry products		
Matrix	As listed on NATA Scope.		
ALS Department	<input type="checkbox"/> Pharmaceutical Chemistry <input type="checkbox"/> Water Microbiology <input checked="" type="checkbox"/> Food Microbiology <input type="checkbox"/> Pharmaceutical 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 checked="" type="checkbox"/> Spread Plate <input type="checkbox"/> MPN <input type="checkbox"/> Filtration <input 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>Poultry and poultry products are prepared by means of the rinse technique or by subsampling the product to be analysed.</p> <p>Duplicate plates of violet red bile glucose agar (VRBGA) are inoculated with a specified quantity of the test sample if the initial product is liquid, or with a specified quantity of the initial suspension in the case of products, and decimal dilutions are performed if required.</p> <p>Then an over-layer of the same medium is applied. Plates are incubated at 37 °C for 24 hours. Typical colonies are confirmed using biochemical tests and the number of Enterobacteriaceae is calculated per mL or per g of the test sample from the number of confirmed typical colonies per dish.</p> <p>A count of colonies on each plate is then performed, the result being taken from the mean count of a number of plates, taking the dilution</p>		

	factor into account. The number of microorganisms per g of sample is calculated from the number of colonies obtained on selected plates.
Reporting Unit	Enterobacteriaceae Count cfu/g, cfu/bird or cfu/cm ²
LOR/LOQ	< 10

Minimum amount of sample required for analysis	500 g or Poultry unit	Turnaround time	1 working day
--	-----------------------	-----------------	---------------

Author:	Document Controller	Date:	13 th February, 2018
Authorised By:	National Quality Manager	Date:	13 th February, 2018

CONFIDENTIAL