

METHOD SUMMARY – QWI-FM0071

Method Title	Vibrio species Enumeration - MPN - Foods		
Document number	QWI-FM0071	Date Issued	8 th November 2017

Method External References	AS 1766.2.9: 1997: Food Microbiology – Examination for specific organisms – <i>Vibrio parahaemolyticus</i>		
	AS 1766.5: 1994: Preparations of culture media, diluents and reagents		
	AS 5013.11.1-2004: 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 5013.11.3-2012: Food Microbiology – Microbiology of food and animal feeding stuffs – Preparation of test samples, initial suspension and decimal dilutions for microbiological examination – Specific rules for the preparation of fish and fishery products (ISO 6887-3:2003, MOD)		
	APHA: APHA Compendium of Methods for the Microbiological Examination of Foods.		
	ThermoFisher Scientific: Technical Note: Diagnostic Discs (0129 test)		
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 checked="" 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>This method documents the procedure for the enumeration of <i>Vibrio spp</i> using the MPN technique.</p> <p>Inoculate three (3) or five (5) tubes of either double or single strength liquid selective enrichment medium with a specified quantity of the test sample followed by inoculation of further sets of tubes with decimal dilutions of the test sample. Two sequential liquid selective enrichments and solid selective media are used for the isolation of presumptive <i>Vibrio spp</i> and for their subsequent biochemical confirmation. Tubes are incubated at 37 °C for 6 to 8 hours, then subculture into Alkaline Peptone Water (37 °C for 18 to 20 hours) and streaked out onto selective agar TCBS (37 °C for 18 to 20 hours). Subsequently incubated broth are streaked out onto another set of TCBS selective agar plates and incubated at 37 °C for 18 to 20 hours. Presumptive isolated organisms are further subcultured onto secondary confirmatory media and biochemical</p>		



	analysis for determination of final results.
Reporting Unit	Vibrio spp (MPN) / g or mL
LOR/LOQ	< 3

Minimum amount of sample required for analysis	10 g or 10 mL	Turnaround time	4 days
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Authorised By:	National Quality Manager	Date	13 th December 2017

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