

METHOD SUMMARY – QWI-FM0031



Method Title	Bacillus Cereus Enumeration - AS		
Document number	QWI-FM0031	Date Issued	10 th May 2019

Method External References	<p>AS 5013.2 – 2007 Food Microbiology – Food and animal feeding stuffs – Horizontal method for the enumeration of <i>Bacillus cereus</i> Colony Count technique at 30 °C</p> <p>AS 5013.11.1-2018 Food Microbiology - Microbiology of the food chain – Preparation of test samples, initial suspension and decimal dilutions for microbiological examination – General rules for the preparation of the initial suspension and decimal dilutions (ISO 6887-1:2017, MOD)</p> <p>AS 5013.14.1-2010 Food Microbiology - Microbiology of food and animal feeding stuffs - General rules for microbiological examinations</p>
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 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"/> Other (please specify): _____
Method Scope	<p>This method documents the enumeration of viable presumptive and confirmed <i>Bacillus cereus</i> by means of a colony-count technique using the spread plate method and an incubation temperature of 30 °C. It is applicable to products intended for human consumption and the feeding of animals, and environmental samples in the area of food production and food handling.</p> <p>The confirmation stage includes an additional motility test to help to differentiate <i>B. cereus</i> from <i>B. anthracis</i> in cases where the presence of the latter is suspected.</p>
Method Principle	<p>A specified quantity of the test sample if the initial product is liquid, or a specified quantity of an initial suspension in the case of other products, is surface plated onto a solid selective culture medium contained in Petri dishes.</p> <p>Other plates are prepared under the same conditions, using decimal dilutions of the test sample or of the initial suspension.</p> <p>The plates are incubated under aerobic conditions at 30 °C for 18 to 48 hours.</p> <p>The number of <i>B. cereus</i> per gram or per millilitre of sample is calculated from the number of confirmed colonies obtained on plates at dilution levels chosen so as to give a significant result, and confirmed according to the test specified. Alternatively, when</p>

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	confirmation is inconclusive colonies are reported as presumptive <i>Bacillus cereus</i> per amount of product tested.
Reporting Unit	CFU/g or CFU/mL or CFU/swab
LOR/LOQ	<10 or <100

Minimum amount of sample required for analysis	10 g	Turnaround time	48 hours
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Author:	Document Controller	Date:	23 rd August 2019
Authorised By:	National Quality Manager	Date:	23 rd August 2019

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