

METHOD SUMMARY – QWI-FM0036

Method Title	Air Quality Merck MAS 100 Air Sampler – In House		
Document number	QWI-FM0036	Date Issued	26 th July 2018

Method External References	MAS-100 Merck Operator's Manual
Matrix	As listed on NATA Scope.
ALS Department	<input type="checkbox"/> Pharmaceutical Chemistry <input type="checkbox"/> Water Microbiology <input checked="" 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 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 is used for the determination of the number of organisms present in 1 cubic metre of air. The method includes detailed procedures about operating maintaining and calibrating Merck MAS-100 and MAS-100NT Air Samplers.</p> <p>The Merck MAS-100 and MAS-100NT Air Samplers perform on the principle of an impaction, whereby microbial aerosols are collected on an agar surface.</p> <p>An impactor consists of an air jet that is directed over the impaction plate so that the particles collide with and stick on the surface. Impaction methods give higher particle recovery than other methods.</p> <p>Air quality is measured quantitatively by means of the Merck MAS-100 and MAS-100NT Air Samplers.</p> <p>The choice of agar is determined by the targeted organism selected. Media sterility control plates are also performed with the test.</p>
Reporting Unit	cfu/m ³
LOR/LOQ	<1 cfu/m ³

Minimum amount of sample required for analysis	N/A	Turnaround time	5 days
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Author:	Document Controller	Date:	14 th August 2018
Authorised By:	National Quality Manager	Date:	14 th August 2018