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## CERTIFICATE OF ANALYSIS

NO: 201805006

<b>Product Name</b>	Methyl 5-chloropyrazine-2-carboxylate		
<b>CAS</b>	33332-25-1	<b>Rainbow Code</b>	RB3018
<b>Batch No</b>	RB3018-170303	<b>Customer Code</b>	N/A
<b>Manufacturing Date</b>	2017.03.30	<b>Delivery Quantity</b>	N/A
<b>Test/Method</b>	<b>Specification</b>		<b>Result</b>
Appearance	Light yellow powder		Light yellow powder
Identification ( <sup>1</sup> HNMR)	Conforms to the structure		Conforms
Purity (HPLC, %a/a)	NLT 98.0%		98.8% (254nm)
Single unspecified impurity (HPLC, %a/a)	NMT 0.50%		0.49%
Water (K.F., % w/w)	NMT 0.5%		0.02%
Melting Point	88.0-95.0°C		92.5-93.5°C
Residue on Ignition	NMT 0.3%		0.01%
Clarity	Methanol and acetonitrile		Conforms
Conclusion	Meet specifications		
Storage Condition: Preserve in tight containers. Store below 20°C.			
Generated by		Approved by	
Date	2018.05.10	Date	2018.05.10