



QINGDAO AURORA CHEMICAL CO., LTD

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CERTIFICATE OF ANALYSIS

PRODUCT	: Piroctone Olamine
BATCH NO.	: 20160623
QUANTITY (NET WEIGHT)	: 500KGS
ANALYSIS DATE	: Mar 23,2016
MANUFACTURING DATE	: Mar 23,2016
EXPIRY DATE	: Mar 22,2018

THIS IS TO CERTIFY THAT WE, THE UNDERSIGNED, HAVE INSPECTED THE QUALITY OF MENTIONED GOODS AND FOUND THE RESULTS OF INSPECTION AS FOLLOWS:

TESTING CONTENTS ANALYSIS			
SAMPLE DETAILS: COMPOSITE SAMPLE TAKEN AT FILLING STATION NO 1			
NO.	ANALYSIS ITEM	STANDARD	RESULT
1	Appearance	White or slightly yellow crystalline powder	White crystalline powder
2	Odor	Characteristic	Conform
3	Solubility	Water (0.10g +10mL):non-soluble Methanol (1.00g + 10mL): soluble	Conform
4	Purity(HPLC) %	≥99.0	99.48
5	pH value(1% in water,20℃)	8.5-10.0	9.77
6	Melting Point ℃	130-135 ℃	134.4 ℃
7	Drying loss %	≤0.3	0.08
8	Ash(SO4) %	≤0.2	0.10
9	Particle size distribution	D(0.5): 30-50um Provide a profile representative of the raw material	40
10	E1% (1cm) at 317 nm expressed an dried substance	214-236	232
11	Ethanolamine %	20.0-21.0	20.3
12	Nitrosamine content PPb	≤50	<40
13	Heavy metals(Pb,As,Cd,Co,Cr,Hg,Ni,Sb) PPM	≤10	<8
15	Hexane(GC) PPM	≤300	Absent
15	Ethyl acetate(GC) PPM	≤5000	<1000
CONCLUSION		QUALIFIED	

ANALYST:QIN LIJIN

CHEKER:CAI JIAN