



# JINAN JIUAN ESTER CHEMICAL CO.,LTD.

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## CERTIFICATE OF ANALYSIS

Product Name :	Betaine Anhydrous	Country of Origin:	China
Batch No.:	20160704	Quantity:	500Kg
Manufacture time:	2016.07.05	Expiry Date:	2018.07.04
Packing:	25kg/Drum	Standard:	USP

Item	Specification	Results	Test Method
Appearance	White crystalliner powder	Conform	Visual
Assay(on dry basis)	NMT 99.0%	99.20%	Titration
Loss on Drying	NMT 2%	0.92%	Drying(105°C,3h)
pH(10% aqua):	5.0-7.0	6.68	pH meter
Chloride:	NMT 0.01%	Conform	Colorimetric method
Sulphate:	NMT 0.01%	Conform	Colorimetric method
Residue on Ignition	NMT 0.1%	0.04%	Electric furnace(550°C)
Heavy Metals	NMT 10 ppm	Conform	Colorimetric method
Arsenic	NMT 1 ppm	Conform	ICP
Lead	NMT 1 ppm	Conform	ICP
Total Plate Count	NMT 1000cfu/g	Conform	Viable plate count
Yeast and Mold	NMT 100cfu/g	Conform	Viable plate count
E.coli	Negative	Conform	USP<62>
Salmonella	Negative	Conform	USP<62>
Staphylococcus	Negative	Conform	USP<62>
Particle Size	Thru20 mesh	100%	Sieving

### Conclusion:

The test results correspond to the chemical grade of In-house Standard.

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