



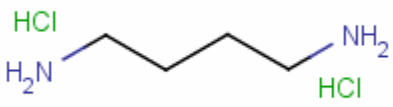
HANGZHOU DINGYAN CHEM CO.,LTD

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## CERTIFICATE OF ANALYSIS

NO: **DYC081905271**

Product name	1,4-Diaminobutane dihydrochloride
CAS Number	333-93-7
Molecule Structure	
Molecule Formula	C4H13ClN2
Batch number	20190105
Manufacture date	2019-01-05
Testing date	2019-01-05

Items	Standard	Result
Appearance	White Crystalline Powder	White Crystalline Powder
Clarity and color of solution	Clarity and colorless	Conforms
Assay	≥98.0%	99.23%
Loss on drying	≤0.50%	0.14%
Chloride	42.3-45.8%	43.23%
MP	>275°C	Complies
Residue on ignition	≤0.20%	0.10%
Sulfate (SO4)	≤0.02%	<0.02%
Iron(Fe)	≤0.002%	<0.002%
Heavy metals (Pb)	≤0.002%	<0.002%

Hangzhou Dingyan Chem Co., Ltd.

QUALITY CONTROL:

Quality Control  
*Paula*  
Signature

CHECK: 姚仙娟

INSPECTOR: 刘清风