



Certificate of Analysis

Product and Batch Information			
Product Name:	N-Methyl-D-Aspartic Acid	Country of Origin:	P.R. China
CAS No.:	6384-92-5	Molecular Weight:	147.1
Molecular Formular:	C ₅ H ₉ NO ₄	Batch:	CS-NMDA-160506
Manufacture Date:	May 06, 2016.	Expired Date:	May 05, 2018.

Item	Specification	Result	Test Method
Active Ingredients			
Assay(% ,On Dried Base)	NLT99.0%	99.74%	HPLC
Physical Control			
Appearance	Fine Crystalline Powder	Complies	Visual
Color	White to Off White	Complies	Visual
Odor&Taste	Neutral	Complies	Organoleptic
Identification	Positive	Complies	NMR
Melting Point(°C)	187-192	189.3-190.7	USP
Specification Rotation[a] ^{20D}	-27.5 to -30	-28.6	USP
Ph	2.2-3.2	2.5	USP
Loss on Drying	1.0% Max	0.84%	USP
Chemical Control			
Heavy metals	NMT10PPM	Conforms	CPh
Arsenic (As)	NMT 2ppm	Conforms	Atomic Absorption
Mercury(Hg)	NMT1ppm	Conforms	Atomic Absorption
Lead (Pb)	NMT2ppm	Conforms	Atomic Absorption
Cadmium(Cd)	NMT1ppm	Conforms	Atomic Absorption
Sulfate(SO ₄)	NMT 0.020%	Conforms	CPh
Chloride(Cl)	NMT 0.020%	Conforms	CPh
Solvents Residual	Meeting USP Standard	Conforms	GC
Other Amino Acids	NMT0.3%	Conforms	HPLC-USP
Packing and Storage			
Packing	Pack in paper-drums and a Aluminum foil lined-bags inside. 25Kg/Drum		
Storage	Store in a well-closed container away from moisture and direct sunlight.		
Shelf Life	2 years if sealed and stored properly.		

QC: