

CERTIFICATE OF ANALYSIS

Product Name:	N-Acetyl-L-Cysteine(Acetylcysteine)	Report Date:	May 21, 2017
Formula:	C ₅ H ₉ NO ₃ S	Batch No.:	170318
CAS No.:	616-91-1	Manu. Date:	May 18, 2017
Inspection Standard:	AJI92	Exp. Date:	May 17, 2019

RESULTS OF ANALYSIS

Test Items	Specifications	Results	Test Methods
Appearance	White crystals or crystalline powder	Conforms	Visual
Identification	Infrared Absorption	Conforms	IR
Specific rotation $[\alpha]_D^{20}$	+21.3° to +27.0°	+22.5°	AJI Test 1
State of solution (Transmittance)	Clear and colorless not less than 98.0%	99.8%	AJI Test 2
Chloride(Cl)	Not more than 0.04%	<0.04%	AJI Test 3
Ammonium (NH ₄)	Not more than 0.02%	<0.02%	AJI Test 4
Sulfate (SO ₄)	Not more than 0.030%	<0.030%	AJI Test 5
Iron(Fe)	Not more than 20ppm	<20ppm	AJI Test 6
Heavy metals (Pb)	Not more than 10ppm	<10ppm	AJI Test 7
Lead	Not more than 3ppm	<3ppm	AFS
Arsenic(as As ₂ O ₃)	Not more than 1ppm	<1ppm	AJI Test 8
Other amino acids	Chromatographically not detectable	Conforms	AJI Test 10
Loss on Drying	Not more than 0.5%	0.06%	AJI Test 11
Residue on ignition(sulfated)	Not more than 0.20%	0.08%	AJI Test 13
Assay	98.5 to 101.0% (Calculated on the dried basis)	99.8%	AJI Test 16
pH	2.0 to 2.8	2.2	AJI Test 33
Melting point	106 to 110°C	108 to 109°C	AJI Test 36
Particle Size	20 Mesh	Conforms	Sieve
Conclusion:	Conforms to the specifications of AJI92		

Analyst: **侯健之**Auditor: **辽薛兰**Chief of QC: **于铁梅**