



**Hongda**  
Phytochemistry

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**Factory:** No.2, Hongda Industrial District, Dacheng, Sanyuan, Xianyang, Shaanxi,China.  
**USA Warehouse:** 1932 S. Lynx PL, Ontario, CA 91761,US  
**NJ Warehouse:** 52 Butler Street, Unit A Elizabeth, NJ 07206

## Certificate of Analysis

### Sodium Copper Chlorophyllin

<b>Batch No.</b>	SCC-20201020	<b>Manufacturing Date</b>	10/20/2020
<b>Batch Quantity</b>	1000KG	<b>Expiration Date</b>	10/19/2023
<b>Appearance</b>	Dark green powder	<b>Country of Origin</b>	China
<b>Sterilization Method</b>	Heat    NON-IRR	<b>CAS No.</b>	28302-36-5

ITEMS	SPECIFICATION	RESULT	METHOD
Sodium Copper Chlorophyllin (As is)	97% – 103%	102%	USP <851>
Ratio(A405/A630)	3.0-3.9	3.55	USP <851>
Total Copper (As is)	4.0% – 7.0%	4.96%	USP <851>
Sodium (As is)	5% – 10%	5.70%	USP <851>

#### PHYSICAL CHARACTERISTICS

Particle Size	≥ 95% through 60 mesh	Conform	Analytical sieving    USP <786>
Loss on Drying	≤ 7%	3.20%	USP <731>
Residue on Ignition	≤ 30%	24.50%	USP <281>
Absorptance	≥ 568	579.40	USP <851>
pH	9.5 – 10.7	10.50	USP <791>

#### CHEMICAL CHARACTERISTICS

Pesticide Residue	Meet the requirements	Conform	GC    USP <561>
Heavy Metals(as Pb)	NMT 10µg/g	Conform	USP <231> Method II
Arsenic (As)	NMT 2.0µg/g	0.300µg/g	ICP-MS
Lead (Pb)	NMT 1.0µg/g	0.250µg/g	ICP-MS
Cadmium(Cd)	NMT 0.5µg/g	<0.1µg/g	ICP-MS
Mercury(Hg)	NMT 0.5µg/g	<0.1µg/g	ICP-MS
Chromium(Cr)	NMT 20µg/g	Conform	ICP-MS
Free Copper	NMT 0.25%	0.020%	ICP-MS

#### MICROBIOLOGICAL CHARACTERISTICS

Total Plate Count	NMT1,000cfu/g	Conform	USP<61>
Total Yeast & Mold	NMT100cfu/g	Conform	USP<61>
E.Coli	Not Detected in(g) 10	Not Detected	USP<61>
Salmonella	Not Detected in(g) 25	Not Detected	USP<61>
Staphylococcus	Not Detected in(g) 10	Not Detected	USP<61>

#### Packing and Storage

Polyethylene bag with cardboard drum. 25kg net.  
 Store in tight, light-resistant containers, avoid exposure to direct sunlight, moisture and excessive heat.

Tested by: *Tracy Cui*

Date: 10/28/2020

Approved by: *Jack Jia*

Date: 10/28/2020