



Certificate of Analysis

Bovine Collagen

Batch No.	20190805	Manufacturing Date	8/5/2019
Batch Quantity	18000KG	Expiration Date	8/4/2022
Source	<i>Bovine Skin</i>	Country of Origin	China
Appearance	Light Yellow white Fine Powder	Part Used	Skin

ITEMS	SPECIFICATION	RESULT	METHOD
Protein	≥90%	92.36%	Kjeldha hi Method
Identification	Correspond to standard	Conform	TLC USP<201>

PHYSICAL CHARACTERISTICS

Particle Size	NLT 95% Through 80 mesh	99.50%	Analytical sieving USP <786>
Molecular Weight	≤5000	Pass	HPLC
Loss on Drying	NMT 10.00%	5.80%	USP <731>
Total Ash	NMT 2.00%	1.20%	USP <561>
PH	4.0-7.5	5.7	USP
Bulk Density	Between 30-60g/100ml	35.00g/100ml	USP <616> Method I

CHEMICAL CHARACTERISTICS

Residual Solvent	NMT 5000ppm	Conform	GC USP <467>
Heavy Metals(as Pb)	NMT 10ppm	Conform	USP <231> Method II
Lead (Pb)	NMT 1ppm	< 1ppm	ICP-MS
SO ₂	NMT 50ppm	Pass	USP /N.F
Peroxides	NMT 10ppm	Pass	USP /N.F

MICROBIOLOGICAL CHARACTERISTICS

Total Plate Count	NMT1000cfu/g	200cfu/g	USP<61>
Total Yeast & Mold	NMT100cfu/g	Not Detected	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. 20kg net.
Store in tight, light-resistant containers, avoid exposure to direct sunlight, moisture and excessive heat.

Tested by: *Troy Cui*

Date: 08/12/2019

Approved by: *Jack Joo*

Date: 08/12/2019