



Xi'an Green Spring Technology Co.,Ltd

## CERTIFICATE OF ANALYSIS

Product Name :	Lutein	Batch Number:	20230424GS
Botanical Source:	Marigold	Manufacture Date :	Apr.24,2023
Part Used:	Flower	Analysis Date :	Apr.26,2023
Quantity :	150Kgs	Expire Date :	Apr.25,2025

ITEM	STANDARD	TEST RESULT	TEST METHOD
Lutein	≥80%	80.16%	HPLC
<b>Physical &amp; Chemical</b>			
Appearance	Orange-Red Powder	Complies	Visual
Odor	Characteristic	Complies	USP<621>
Loss on Drying	≤5.0%	1.1%	USP<731>
Particle size	95% pass 120 mesh	Complies	USP<786>
Residue on ignition	≤0.2%	0.04	USP<281>
Ash Contents	≤5.0%	1.6%	USP<221>
Specific rotation	+26.0° - 27.9°	+27.3°	USP<781>
<b>Heavy Metal</b>			
Heavy metal	≤5.0ppm	<5.0ppm	ICP-MS
As	≤2.0ppm	<0.01ppm	ICP-MS
Arsenic	≤2.0ppm	<0.01ppm	ICP-MS
Cd	≤1.0ppm	<1.0ppm	ICP-MS
HG	≤0.1ppm	<0.1ppm	ICP-MS
<b>Microbiological Test</b>			
Total plate count	≤1000CFU/g	60CFU/g	AOAC
Yeast & Mold	≤100CFU/g	<10ppm	AOAC
Coliform	Negative	Negative	AOAC
E-Coli	≤30 MPN/g	<3 MPN/g	AOAC
Staphylococcus	Negative	Negative	AOAC

**Conclusion** Conforms with specification, Non-GMO Allergen Free, BSE/TSE Free

**Storage** Stored in cool and dry places. Keep away from strong light and heat

**Packing** By 25kgs/Drum, inner by double plastic bag

**Shelf life** 24 months under the above condition, and in it's original package.

Quality Assurance: Liang Yan

