

SHAANXI YOUGU BIOTECHNOLOGY CO., LTD

CERTIFICATE OF ANALYSIS

Product Name: Zeaxanthin (Marigold extract)	Date Test: Mar.29,2019	Mfg Date: Mar.28,2019	
Botanical Name: <i>Tagetes erecta L.</i>	Plant part: Flower	Exp. date: Mar.27,2021	
Batch No.: 19032802	Weight: 420 kg	Origin: China	
Items	SPECIFICATIONS	Results	METHOD/STANDARD
Characters	Powder	Qualified	Organoleptic
Color	Reddish fine powder	Qualified	Organoleptic
Odor & Taste	Characteristic	Qualified	Organoleptic
Mesh	80	100% pass 80 mesh	Sieve 80
Loss on drying	≤5.0%	2.07%	3h/105 °C
Ash	≤5.0%	0.45%	5h/750 °C
Loose density	0.5-0.8g/ml	0.55g/ml	60g/100ml
Tapped density	0.6-1.0g/ml	0.74g/ml	60g/100ml
Extract Solvent	Hexane & Ethanol	Qualified	--
Residual solvent			
Hexane	≤50 ppm	Qualified	GC
Ethanol	≤500 ppm	Qualified	GC
Identification:		Positive(+)	By HPLC/TLC
Assay	Zeaxanthin ≥20.0%	20.21%	HPLC
Heavy Metals	≤10ppm	Qualified	ASS
Pb	≤1ppm	0.241ppm	ASS
As	≤2ppm	0.260ppm	ASS
Hg	≤0.1ppm	0.002ppm	ASS
Pesticides residues			
666	≤0.1ppm	Qualified	GC
DDT	≤0.1ppm	Qualified	GC
Quintozine	≤0.1ppm	Qualified	GC
Microbiological			
Total Plate Count	1000cfu/g Max	<100cfu/g	CP2010
Yeast& Mold	100cfu/g Max	<10cfu/g	CP2010
E.Coli colonies/g	Negative(-)	Negative	CP2010
Samonella colonies/g	Negative(-)	Negative	CP2010
General Status			
GMO Free	None	Qualified	--
Non-Irradiation	None	Qualified	--

Conclusion: Confirm to Specification

Packing: Packed in paper-drums and two plastic-bags inside N.W: 25kgs. I.D. 35 x H51cm

Storage: Cool& dry place. Do not freeze. Keep away from strong light and heat

Shelf life: 2 Years under the conditions above and in its original packaging.

QC MANAGER:  Jianyuan Cai

APPROVER:  Huiqing Jiao

ANALYST:  Yanping Xiao