

Certificate of Analysis

Product Name	Marigold Extract	Batch Number	YG-DNAXG200906
Latin Origin	<i>Tagetes erecta</i> L.	Manufacture Date	20200912
Used part	Flower	Analysis Date	20200915
Quantity	353KG	Expiry Date	20220911

ITEMS	SPECIFICATION	RESULTS	TEST METHODS
Active Ingredients Tests			
Lutein (HPLC)	≥20.0%	20.1%	USP37<621>
Zeaxanthin (HPLC)	≥1.0%	1.18%	USP37<621>
Physical Tests			
Appearance	Orange yellow or red yellow viscous oil	Complies	Visual
Odor	Characteristic	Complies	Organoleptic
Taste	Characteristic	Complies	Organoleptic
Loss on drying	≤5.0%	4.18%	USP37<921>
Ash content	≤5.0%	0.45%	USP37<281>
Chemical Tests			
Heavy Metals	≤10.0ppm	Complies	USP37<231>
As	≤1.0ppm	Complies	USP37<211>
Pb	≤2.0ppm	Complies	USP37<251>
Cd	≤1.0ppm	Complies	USP37<232>
Hg	≤0.1ppm	Complies	USP37<261>
Solvent residue	≤1000ppm Ethanol	Complies	USP37<467>
Microbiological Tests			
Total Plate Count	≤1000 cfu/g	60cfu/g	USP37<2021>
Yeast and Mold	≤100 cfu/g	≤10cfu/g	USP37<2021>
Coliforms	≤3mpn/g	Complies	USP37<2022>
E.Coli	Negative	Complies	USP37<2022>
Pseudomonas aeruginosa	Negative	Complies	USP37<2022>
Salmonella	Negative	Complies	USP37<2022>
Staphylococcus aureus	Negative	Complies	USP37<2022>
Statements	Non-Irradiated, GMO free, HALAL Certificated.		
Conclusion	Conform to above specification		
Packaging	5kg per vacuum foil bag, 25kg per fiber drum.		
Storage	Store in origin packaging, preserve in hermetically sealed light & oxygen-resistant containers.		
Shelf Life	2 years when properly stored.		
Analyzed by	Li Meng	Approved by	Yang Hongmei