



西安绿泉科技有限公司
Xi'an Green Spring technology Co.,Ltd

CERTIFICATE OF ANALYSIS

Product Name:	L-Glutathione Reduced		
Batch Quantity:	500kg	Batch Number:	230702
Mfg Date:	Jul.2.2023	Exp Date:	Jul.2.2025

Analysis Item	Specification	Result	Analytical Method reference
Appearance	White or almost white crystalline powder	White crystalline powder	Visual
Identification IR	Conforms to the Reference Spectrum	Conforms to the Reference Spectrum	USP43
Appearance of solution	Freely soluble in water, very slightly soluble in ethanol and in methylene chloride	Complies	Visual
Assay%	98.0 to 101.0	98.2	USP43
Related compounds	Total	Maximum 2.0%	1.45%
	GSSG	Maximum 1.5%	0.62%
Bulk Density g/ml	≥ 0.20	0.3575	USP43
Tapped Density g/ml	≥ 0.40	0.6801	USP43
Total impurities %	≤ 2.0	0.5	UPS43
L-glutathione oxidized %	≤ 1.5	0.2	UPS43
Loss on drying %	≤ 0.5	0.251	UPS43
Residue on Ignition %	≤ 0.1	<0.1	UPS43
S.O.R	-15.5 ° ~ -17.5 °	-16.87 °	UPS43
Infrared	Positive	Positive	UPS43
Ammonium ppm	≤ 200	<200	UPS43
Chloride ppm	≤ 200	<200	UPS43
Sulfate ppm	≤ 300	<300	UPS43
Iron ppm	≤ 10	<10	UPS43
Heavy metals ppm	≤ 10	<10	UPS43
Arsenic ppm	≤ 2.0	<2.0	UPS43
Cadmium ppm	≤ 1.0	<1.0	UPS43
Lead ppm	≤ 3.0	<3.0	UPS43
Mercury ppm	≤ 1.0	<1.0	UPS43
Total Plate count cfu/g	≤ 1000	<10	Conformed
Molds and Yeast cfu/g	≤ 100	<10	Conformed
Coliforms cfu/g	≤ 30	<10	Conformed
E.Coli	Negative/10g	Negative	Conformed
Staphylococcus Aureus	Negative/10g	Negative	Conformed
Salmonella	Negative/10g	Negative	Conformed

Packaging	The product is contained in a Low-density polyethylene bag(food grade). The inner bag is contained in cardboard drum,20kg per drum.
Storage	Store in cool & dry place . Do not freeze. Keep away from strong light and heat.
Shelf life	2 years when properly stored.

