

## Certificate of analysis

### Vitamin E Succinate

CAS No	4345-03-3	Code	BIOJVSE001
Batch No.	H20240305	Manufacture Date	Mar.25, 2024
Expiry Date	Mar.24, 2026	Quantity	30Kg

Testing Items	Specifications	Results
Identification	Color reaction: Positive	Positive
	Specific Rotation $[\alpha]_D^{25^\circ}$ : $\geq +24^\circ$	+24.7°
	Retention Time: The retention time of the major peak in the test solution is the same as that of the standard preparation	Complies
Acidity	18.0ml~19.3ml	18.8ml
Assay	96.0%~102.0% $\geq 1162\text{IU}$	99.5% 1204IU
Appearance	White to off-white granular or powder.	Complies
Particle size	Residue on 20 meshes $\leq 1\%$	0.4%
Bulk density	0.45 g/cm <sup>3</sup> ~0.60 g/cm <sup>3</sup>	0.51g/cm <sup>3</sup>
Benzo(a)Pyrene	$\leq 2\text{ppb}$	<2ppb
Solvent residue	Hexane $\leq 290\text{ppm}$ Ethanol $\leq 5000\text{ppm}$	18ppm 4ppm
Heavy metals(As Pb)	$\leq 10\text{mg/kg}$	Complies
Heavy metals	Lead: $\leq 1.0\text{mg/kg}$ Arsenic: $\leq 1.0\text{mg/kg}$ Cadmium: $\leq 1.0\text{mg/kg}$ Mercury: $\leq 0.1\text{mg/kg}$	<1 mg/kg <1 mg/kg <1 mg/kg <0.1 mg/kg
Microbiology	Total Bacterial Count $\leq 1000\text{cfu/g}$ Yeast and Molds $\leq 100\text{cfu/g}$ Escherichia Coli $< 10\text{cfu/g}$ Salmonella: Negative in 25g Staphylococcus Aureus: Negative in 10g	Complies Complies Complies Negative Negative
Conclusion	This product conforms to USP-NF2023	

**\*Storage condition: Store below 25°C, Protect from moisture and light.**