



CERTIFICATE OF ANALYSIS

Product name: Ascorbyl Palmitate Food Grade

Batch No.: AP2023030701

Manufacturing date Mar 15,2023

Reporting date: Mar 20,2023

Retest date:Mar 14,2025

Quantity: 340.6kg

Package: 25 kg per carton

Package size: 370*370*630 (mm)

Irradiation / ETO treatment: No

Test Item	Specification	Method	Result
Appearance	A white or yellowish-white powder	BP2022, NF2021, FCC12	white powder
Identification			
Specific optical rotation	+21° ~ +24°	BP2022	+22.3°
Infrared absorption	Consistent with the CRS	BP2022, NF2021, FCC12	Consistent with the CRS
Color reaction	The sample solution decolorizes dichlorophenol-indophenol TS	BP2022, FCC12	The sample solution decolorizes dichlorophenol-indophenol TS
Chromatographic identity	The retention time of the major peak of the Sample solution corresponds to that of the Standard solution	NF2021, FCC12	The retention time of the major peak of the Sample solution corresponds to that of the Standard solution
Appearance of solution	Clear, not more intense than BY4	BP2022	Clear, less intense than BY4
Specific optical rotation	+21° ~ +24°	BP2022, NF2021, FCC12	+22.3°
Lead	NMT 2 mg/kg	FCC12	0.018mg/kg
Melting range	107 ~ 117°C	FCC12	108.8°C~111.5°C
	NMT 1.0%	BP2022	0.16%
Loss on drying	NMT 2.0%	NF2021	0.2%
	NMT 2%	FCC12	0.15%
Sulphated ash	NMT 0.1%	BP2022	0.03%
Residue on ignition	NMT 0.1%	NF2021, FCC12	0.03%
Residual solvent	NMT 0.5%	NF2021	<0.5%
	98.0% ~ 100.5%	BP2022	99.95%
Assay	95.0% ~ 100.5%	NF2021	99.9%
	NLT 95.0%	FCC12	99.9%

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(CONTINUED)

Test Item	Specification	Method	Result
Additional testing			
Odor	Without caramel smell	In-house	Without caramel smell
Thermo tolerance	Not more intense than BY ₄	In-house	Less intense than BY ₄
Solubility	Very slightly soluble in cold water	USP 40	Very slightly soluble in cold water
Heavy metals			
Lead	≤0.5 mg/kg	AAS, in-house	<0.5 mg/kg
Cadmium	≤0.5 mg/kg	AAS, in-house	<0.5mg/kg
Arsenic	≤0.5 mg/kg	AAS, in-house	<0.5 mg/kg
Mercury	≤0.1 mg/kg	AAS, in-house	<0.1 mg/kg
Microbials			
Total Aerobic Microbial Count	NMT 100 cfu/g	ChP2020	<100 cfu/g
Total Yeasts and Moulds Count	NMT 10 cfu/g	ChP2020	<10 cfu/g
E. Coli	Negative	ChP2020	Negative
Salmonella	Negative	ChP2020	Negative
S. Aureus	Negative	ChP2020	Negative
Conclusion: <i>This batch complies with the specification of BP2022, USP 40, FCC12 and additional requirements for heavy metals and microbials.</i>			
Remark: Preserve in airtight containers, protected from light, at a temperature of 8 °C to 15 °C.			

Reported by:

Approved by:

END OF CERTIFICATE