



# 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
<b>Appearance</b>	A white or yellowish-white powder	BP2022, NF2021, FCC12	white powder
<b>Identification</b>			
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
<b>Appearance of solution</b>	Clear, not more intense than BY4	BP2022	Clear, less intense than BY4
<b>Specific optical rotation</b>	+21° ~ +24°	BP2022, NF2021, FCC12	+22.3°
<b>Lead</b>	NMT 2 mg/kg	FCC12	0.018mg/kg
<b>Melting range</b>	107 ~ 117°C	FCC12	108.8°C~111.5°C
	NMT 1.0%	BP2022	0.16%
<b>Loss on drying</b>	NMT 2.0%	NF2021	0.2%
	NMT 2%	FCC12	0.15%
<b>Sulphated ash</b>	NMT 0.1%	BP2022	0.03%
<b>Residue on ignition</b>	NMT 0.1%	NF2021, FCC12	0.03%
<b>Residual solvent</b>	NMT 0.5%	NF2021	<0.5%
	98.0% ~ 100.5%	BP2022	99.95%
<b>Assay</b>	95.0% ~ 100.5%	NF2021	99.9%
	NLT 95.0%	FCC12	99.9%

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(CONTINUED)

Test Item	Specification	Method	Result
<b>Additional testing</b>			
Odor	Without caramel smell	In-house	Without caramel smell
Thermo tolerance	Not more intense than BY <sub>4</sub>	In-house	Less intense than BY <sub>4</sub>
Solubility	Very slightly soluble in cold water	USP 40	Very slightly soluble in cold water
<b>Heavy metals</b>			
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
<b>Microbials</b>			
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
<b>Conclusion:</b> <i>This batch complies with the specification of BP2022, USP 40, FCC12 and additional requirements for heavy metals and microbials.</i>			
<b>Remark:</b> Preserve in airtight containers, protected from light, at a temperature of 8 °C to 15 °C.			

Reported by:

Approved by:

END OF CERTIFICATE