

CERTIFICATE OF ANALYSIS

Product Name	Alpha GPC	Manufacture Date	2024/11/04
CAS No.	28319-77-9	Expire Date	2026/11/03
Formula	C ₈ H ₂₀ NO ₆ P	Issue Date	2024/11/ 05
Batch Quantity	300kg	Batch Number	A20241104

Items	Specification	Result
Physical& Chemical Data		
Description	White powder, neutral odor. very highly hygroscopic.	Complies
Identification(TLC)	Conforms to the standard	Complies
Solubility (H ₂ O,10% w/v)	Clear	Complies
Stability	Dry and light protected storage, Stable under normal usage.	Complies
Optical rotation [α] ²⁵	-2.4° to -2.95°	-2.82°
pH	5.0-7.0	6.63
Chloride(Cl)	Not more than 0.02%	Complies
Sulfate	Not more than 0.02%	Complies
Phosphate ion	The color of solution should not stronger than the control solution(5ppm)	Complies
Glycidol	Not more than 0.4ppm	Complies
Chloroglycerin	Not more than 1.0ppm	Complies
Total impurities	Not more than 0.5%	Complies
Solvents residue (Ethanol)	Not more than 1.0%	Complies
Water content	Not more than 2.0%	0.19%
Bulk density range	0.6-0.7g/cm ³	Complies
Single impurity (β -GPC by ³¹ P NMR) (Others by HPLC)	Not more than 0.1%	Complies
Mesh size	50-100 mesh	Complies
Purity (HPLC)	Not less than 99.7%	99.84%
Heavy Metals		
Heavy Metals	NMT10 ppm	<10ppm
Lead(Pb)	NMT3 ppm	<3ppm
Arsenic (As)	NMT2 ppm	<2ppm
Mercury(Hg)	NMT0. 1ppm	<0. 1ppm
Cadmium(Cd)	NMT1 ppm	<1ppm
Microbiological		
TAMC & TYMC (in total)	Not more than 10 ² in 1g	Conforms
E.Coli	Absent in 1g	Conforms
Enterobacteria	Absent in 1g	Conforms
P. Aeruginosa	Absent in 1g	Conforms
S. Aureus (Staphilococcus)	Absent in 1g	Conforms
Salmonella	Absent in 10g	Conforms

General Status

Non- GMO, Allergen Free, Non- Irradiation

Packaging& Storage

Packed in paper-drums and two plastic-bagsinside, 25 kg/ Drum.

Keep in cool & dry place. Stay away from strong light and heat.

Conclusion

Qualified

Europeherb Co., Ltd
西安欧赫生物科技有限公司