



Certificate of Analysis

Product and Batch Information			
Product Name	L-a-glycerylphosphorylcholine	Country of Origin	P.R. China
CAS No.	28319-77-9	Molecular Weight	257
Molecular Formular	C ₈ H ₂₀ NO ₆ P	Batch	CS-GPCP-221023
Manufacture Date	Oct 22, 2022.	Analysis Date	Oct 22, 2022.
Report Date	Oct 26, 2022.	Expired Date	Oct 21, 2024.
Item	Specification	Result	Test Method
Active Ingredient			
Assay(% ,On Dried Base)	99%	99.85%	HPLC
Physical Control			
Appearance	Fine Powder with highly Hygroscopic	Complies	Visual
Color	White to light yellow	Complies	Visual
Odor	Neutral	Complies	Organoleptic
Identification	The R value of the sample and STD should be same.	Complies	TLC
Specification Rotation[α] ²⁵ _D	-2.4° to -2.9°	-2.81	KPC
Solubility(H ₂ O,10% W/W)	Clear	Complies	Visual
Color of Solution	NMT Y7	Complies	KPC
Water	1.0% Max	0.29%	K.F.
Ph(10% GPC Solution,w/v)	5.0-7.0	6.11	KPC
Chemical Control			
Heavy Metals	NMT10PPM	Conforms	CPh
Sulfate(SO ₄)	NMT 0.020%	Conforms	CPh
Iron(Fe)	NMT10PPM	Conforms	CPh
Chloride(Cl)	NMT 0.020%	Conforms	CPh
Phosphate Ion(P)	The color of the sample is not darker than that of reference.	Conforms	KPC
Solvent Residual	Meeting USP Standard	Conforms	GC
Related Substance	Total impurities:NMT2.0%	Conforms	KPC
	Single impurity:NMT0.5%	Conforms	KPC
Microbiological Control			
Total Plate Count	1000cfu/g Max	Conforms	AOAC
Yeast & Mold	100cfu/g Max	Conforms	AOAC
E.Coli	Negative	Negative	AOAC
Salmonella	Negative	Negative	AOAC
Staphylococcus	Negative	Negative	AOAC
Packing and Storage			
Packing	Pack in paper-drums and a Aluminum foil lined-bags inside. 25Kg/Drum		
Storage	Store in a well-closed container away from moisture and direct sunlight.		
Shelf Life	2 years if sealed and stored properly.		

QC: