



TIANJIN HEXIYUAN LECITHIN TECHNOLOGY CO., LTD

Certificate of Analysis

Product Name: Phosphatidylserine 50%, Eurofins IP Certified Non-GMO

Product Code: 1808833 **Batch No.:** 20150601 **P/O NO.:**

QUANTITY: 100G **PACKAGE:** 100G/BAG
MFG.DATE: JUL. 20, 2015 **EXP. DATE:** JUL. 19, 2017

Product Characteristics:

Formula weight 750~850
CAS NO. 84776-79-4
Shelf Life 24 months
Description Light Yellow to Brown Powder
Source Non-GMO Soybeans
Solvents Used Ethanol & water
Excipients 1.0~1.5% Silicon Dioxide
Country of Origin China

<u>Test Items</u>	<u>Specification</u>	<u>Test Result</u>	<u>Method</u>
Identification	Positive	Conform	NMR
Phosphatidylserine	≥50.0%	57.0%	NMR/HPLC
Water	≤2.0%	<2.0%	Karl Fischer
Peroxide Value	≤5.0meq/kg	<5.0meq/kg	Iodide titration
Particle Size (100mesh)	≥90% smaller than 150um	Conform	USP<786>
Bulk Density	≥0.35g/ml	0.37g/ml	USP<616>

Microbiological Profile

Total Plate Count	≤1,000cfu/g	<1,000cfu/g	USP<61>
Yeast & Mold	≤100cfu/g	<100cfu/g	USP<61>
E.coli	Negative	Conform	USP<61>
Salmonella	Negative	Conform	USP<61>

Additional Testing

Heavy Metals	≤10ppm	<10ppm	USP<231>
Lead*	≤3ppm	<3ppm	USP<251>
Arsenic*	≤1ppm	<1ppm	USP<211>
Cadmium*	≤1ppm	<1ppm	AAS
Mercury*	≤0.1ppm	<0.1ppm	USP<261>
Aflatoxin(B1, B2, G1, G2)*	≤0.2ppb	Conform	HPLC-FLD
Ethanol	≤0.5%	Conform	USP<467>

Conclusion: Complies With Specifications.

Storage & Packaging:

Store in tightly closed containers at room temperature. Protected from moisture and pest infestation.

◆ The items with * are tested periodically.

Stamp and Signature