

## Certificate of Analysis

## DSPE-PEG(2000) Amine

1,2-distearoyl-sn-glycero-3-phosphoethanolamine-N-[amino(polyethylene glycol)-2000] (ammonium salt)

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Molecular Weight 2790.521 (average MW due to polydispersity of PEG)

**Chemical Formula** C<sub>132</sub>H<sub>266</sub>N<sub>3</sub>O<sub>54</sub>P (representative due to polydispersity of PEG)

Physical State Powder Storage -20°C

**Expiration Date** One year from date of receipt

M Lot Number 6290PKA077

**Lot Number** 880128P-50MG-A-077

ANALYSIS	SPECIFICATION	RESULTS
Physical Examination	Powder: White solid which contains no foreign matter	Pass
TLC (8:2:0.1 Chloroform: Methanol: Ammonium Hydroxide)	>99% Purity Ninhydrin: positive Iodine: one major spot Phosphorus: positive Charring: negative Water dip: one major spot	>99% Purity Ninhydrin: positive Iodine: one major spot Phosphorus: positive Charring: negative Water dip: one major spot
Proton NMR	NMR spectrum consistent with structure	Consistent with structure
FAME (GC/FID)	NLT 99% 18:0 (AUC)	100% 18:0 (AUC)
HPLC-ELSD	NLT 99% (AUC)	99.4% (AUC)
Molecular Weight (Mw) by LC-TOF-MS	Run and Report	2860.276
Polydispersity Index (PDI) by LC-TOF-MS	Run and Report	1.004

Approved by:

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