

## DSPE-PEG(1000) Carboxylic Acid

1,2-distearoyl-sn-glycero-3-phosphoethanolamine-N-[carboxy(polyethylene glycol)-1000] (sodium salt)

880239P-25mg

Page 1 of 1

**Molecular Weight** 1811.3  
**Chemical Formula** C<sub>87</sub>H<sub>169</sub>NNaO<sub>33</sub>P  
**Physical State** Powder  
**Storage** -20°C  
**Expiration Date** One year from date of receipt  
**M Lot Number** 7043PJA010  
**Avanti Lot Number** 880239P-25MG-A-010

ANALYSIS	SPECIFICATION	RESULTS
Physical Examination	<b>Powder:</b> White solid which contains no foreign matter	Pass
TLC (80:20:2 Chloroform:Methanol:Ammonium Hydroxide)	>99% Purity Ninhydrin: negative Iodine: one major spot Phosphorus: positive Charring: negative Water dip: one major spot	All Pass>99% Purity Ninhydrin: negative Iodine: one major spot Phosphorus: positive Charring: negative Water dip: one major spot
Proton NMR	NMR spectrum consistent with structure	Consistent with structure
Phosphorus NMR	NMR spectrum consistent with structure	Consistent with structure
Carbon NMR	NMR spectrum consistent with structure	Consistent with structure
Molecular Weight (Mw) by TOF-MS	Run and Report	1783.9
Polydispersity Index (PDI) by TOF-MS	Run and Report	1.002

Approved By: *Anderson Thomas*

For Research Use Only. Not For Human Use.