

Certificate of Analysis

18:1 Liss Rhod PE

1,2-dioleoyl-sn-glycero-3-phosphoethanolamine-N-(lissamine rhodamine B sulfonyl) (ammonium salt)

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Molecular Weight 1301.715

Chemical Formula $C_{68}H_{109}N_4O_{14}PS_2$

Physical State Powder Storage -20°C

Expiration Date One year from date of receipt

M Lot Number 5340PHA094

Avanti Lot Number 810150P-5MG-A-094

ANALYSIS	SPECIFICATION	RESULTS
Physical Examination	Powder: Pink to dark pink solid which contain no foreign matter	Pass
TLC	>99% Purity UV: one major spot Ninhydrin: negative Iodine: one major spot Phosphorus: positive Water dip: one major spot	All Pass
Proton NMR	NMR spectrum consistent with structure	Consistent with structure
Phosphorus NMR	NMR spectrum consistent with structure	Consistent with structure
Mass Spectroscopy	[M-NH ₄]- = 1282.72 ± 1 amu	[M-NH ₄]- = 1282.68 amu
Excitation/Emission	λ _{Ex max} ≈ 560 nm λ _{Em max} ≈ 583 nm	$\lambda_{\text{Ex max}}$ = 560 nm $\lambda_{\text{Em max}}$ = 580 nm

Approved By: