

Heart CA

Cardiolipin (Heart, Bovine) (sodium salt)

840012C-25mg

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Molecular Weight	1493.9 (average based on fatty acid distribution in product)
Physical State	Chloroform
Storage	-20°C
Expiration Date	Three months from date of receipt
M Lot Number	5484CJA550
Avanti Lot Number	840012C-25MG-A-550

ANALYSIS	SPECIFICATION	RESULTS
Physical Examination	Chloroform: Clear solution with no foreign matter	Pass
TLC	>99% Purity Ninhydrin: negative Iodine: one major spot Phosphorus: positive Charring: positive Water dip: one major spot	>99% Purity Ninhydrin: negative Iodine: one major spot Phosphorus: positive Charring: positive Water dip: one major spot
Proton NMR	Spectrum consistent with structure	Spectrum consistent with structure
FAME (GC/FID)	Consistent with historical data 18:1 = ~5% 18:2 = ~90%	Consistent with historical data
UV Oxidation	NMT 5% total all wavelengths	4.63% total
Calcium (ICP/MS)	NMT 500 ppm	101.92 ppm
Mass Spectroscopy	Exact Mass: $[M-2Na+H]^- = 1447.94 \pm 1$ amu; $[M-2Na]^{2-} = 723.47 \pm 1$ amu or Molecular Weight: $[M-2Na+H]^- = 1448.92 \pm 1$ amu; $[M-2Na]^{2-} = 723.95 \pm 1$ amu	$[M-2Na]^{2-} = 724.1$ amu

 Approved By: *Anderson Thomas*

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