

## Heart CA

Cardiolipin (Heart, Bovine) (sodium salt)

840012P-25mg

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**Molecular Weight** 1493.895 (average based on fatty acid distribution in product)  
**Physical State** Powder  
**Storage** -20°C  
**Expiration Date** Three months from date of receipt  
**M Lot Number** 5484PJF549  
**Avanti Lot Number** 840012P-25MG-F-549

ANALYSIS	SPECIFICATION	RESULTS
Physical Examination	<b>Powder:</b> White solid which contains 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	3.97% total
Calcium (ICP/MS)	NMT 500 ppm	None detected
Mass Spectroscopy	Exact Mass: [M-2Na+H] <sup>-</sup> = 1447.94 ± 1 amu; [M-2Na] <sup>2-</sup> = 723.47 ± 1 amu or Molecular Weight: [M-2Na+H] <sup>-</sup> = 1448.92 ± 1 amu; [M-2Na] <sup>2-</sup> = 723.95 ± 1 amu	[M-2Na] <sup>2-</sup> = 723.7 amu

Approved By: *Anderson Thomas*

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