

**Heart CA**

Cardiolipin (Heart, Bovine) (sodium salt)

**840012P-25mg**
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<b>Molecular Weight</b>	1493.895 (average based on fatty acid distribution in product)
<b>Physical State</b>	Powder
<b>Storage</b>	-20°C
<b>Expiration Date</b>	Three months from date of receipt
<b>M Lot Number</b>	5484PJE549
<b>Avanti Lot Number</b>	840012P-25MG-E-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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