Heart CA
Cardiolipin (Heart, Bovine) (sodium salt)
840012P-100mg

<table>
<thead>
<tr>
<th>Physical Examination</th>
<th>Powder: White solid which contains no foreign matter</th>
<th>Pass</th>
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</table>
| TLC                  | >99% Purity
Ninhydrin: negative
Iodine: one major spot
Phosphorus: positive
Charring: positive
Water dip: one major spot | All Pass |
| FAME (GC/FID)        | Consistent with historical data
18:1 = ~5%
18:2 = ~90% | Consistent with historical data |
| UV Oxidation         | NMT 5% total all wavelengths | 2% total |
| Calcium (ICP/MS)     | NMT 500 ppm | None Detected |
| Mass Spectroscopy    | Exact Mass: 
[M-2Na+H] = 1447.94 ± 1 amu;
[M-2Na]² = 723.47 ± 1 amu
or
Molecular Weight: 
[M-2Na+H] = 1448.92 ± 1 amu;
[M-2Na]² = 723.95 ± 1 amu | 

[\text{M-2Na+H}] = 1447.9 \text{ amu} \\
\text{M-2Na}^2 = 723.5 \text{ amu}

Approved By:

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