Validation Sheet

Formulation: Assumed to be 100% a.i.
Chemical Name: San 326 10 G
Validator: Ray Matheny
Date: 3/13/79
Test Type: Aquatic Invertebrate Acute Toxicity
Test I.D. #: LICES Proj. No. 11506-16-04

Validation Category: Core

Result: Species: Daphnia magna
         Test 48-hr. LC_{50} 0.70 ug/l* (0.57-0.85 ug/l)
         *Using the Probit Method, a verification of the test resulted
         in an LC_{50} of 0.68 ug/l (0.56-0.83 ug/l)

Validation Category Rationale:

Satisfies Core data requirements

Category Repairability/Rationale:

None necessary

Abstract:

Six concentrations (1.3, 1.0, 0.56, 0.32, 0.18 and 0.12)
of San 326 resulted in the following Mortalities: 0, 0, 3, 6, 14 and 20, respectively. Twenty hour old Daphnia was used. Four replicates were run for each of the six concentrations, with temperatures kept at 21°C ± 2°C. Total hardness as CaCO₃ was 210 mg/l. Dissolved O₂ kept at 8.8 mg/l. and the pH @ 8.38 initially. Vs. 8.28 upon termination.
9001 data 1.30,1.00,0.56,0.33,1.06,1.0
9002 data 20,20,20,20,20,20
9003 data 20,14,6,3,0,0
run

79/03/12, 13:46:53.
BASIC  PROGRAM  A78LC50

<table>
<thead>
<tr>
<th>ONS</th>
<th>NUMBER EXPOSED</th>
<th>NUMBER DEAD</th>
<th>PERCENT DEAD</th>
<th>BINGMIAL PPROB. (PERCENT)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.5</td>
<td>20</td>
<td>20</td>
<td>100</td>
<td>9.53674E-5</td>
</tr>
<tr>
<td>1</td>
<td>20</td>
<td>14</td>
<td>70.</td>
<td>5.76591</td>
</tr>
<tr>
<td>.56</td>
<td>20</td>
<td>6</td>
<td>30.</td>
<td>5.76591</td>
</tr>
<tr>
<td>.32</td>
<td>20</td>
<td>3</td>
<td>15.</td>
<td>.128841</td>
</tr>
<tr>
<td>.18</td>
<td>20</td>
<td>0</td>
<td>0</td>
<td>9.53674E-5</td>
</tr>
<tr>
<td>.1</td>
<td>20</td>
<td>0</td>
<td>0</td>
<td>9.53674E-5</td>
</tr>
</tbody>
</table>

THE BINOMIAL TEST SHOWS THAT .32 AND 1.5 CAN BE USED AS STATISTICALLY SOUND CONSERVATIVE 95 PERCENT CONFIDENCE LIMITS SINCE THE ACTUAL CONFIDENCE LEVEL ASSOCIATED WITH THESE LIMITS IS 99.8714 PERCENT.

AN APPROXIMATE LC50 FOR THIS SET OF DATA IS .748331

--------RESULTS CALCULATED USING THE MOVING AVERAGE METHOD
SPAN   4   LC50  5.18085E-2  .680447  .555368  .799869

--------RESULTS CALCULATED USING THE PPROBIT METHOD
ITERATIONS 6  GOODNESS OF FIT PROBABILITY
           10127  1  .603985
SLOPE = 4.17904 95 PERCENT CONFIDENCE LIMITS = 2.84914 AND 5.50893
LC50 = .881521 95 PERCENT CONFIDENCE LIMITS = .563427 AND .831415

San 326 I  3/12/79
Daphnia magna
Acute Toxicity