CASE GS0097  CHLOROTHALONIL  PM 400  08/03/82

CHEM  081901  Chlorothalonil (tetrachloroisophthalon)

BRANCH EEB  DISC 40  TOPIC 05054543

FORMULATION 06  - WETTABLE POWDER (WP OR W)

FICHE/MASTER ID 00087258  CONTENT CAT 01

McCann, J. A.; Pitcher, F. (1973) "Bravo TM W-75: Bluegill (Lepomis macrochirius)") lo Test No. 548, (U.S. Environmental Protection Agency, Pesticide Regulation Div., Agricultural Research Center, Animal Biology Laboratory and Fish Toxicity Laboratory; unpublished study; CDL: 128550-A)

SUBST. CLASS = S.

DIRECT RVW TIME = (MH) START-DATE  END DATE

REVIEWED BY:  Daniel Rieder
TITLE: Wildlife Biologist
ORG: EEB/HED
LOC/TEL: 557-7666

SIGNATURE:  Daniel Rieder  DATE: 12/16/82

APPROVED BY:
TITLE:
ORG:
LOC/TEL:

SIGNATURE:  DATE:
1. Chemical: Chlorothalonil

2. Sha. No.: 081901


4. Date Reviewed: 10/25/82

5. Reviewed By: Daniel Rieder
   Wildlife Biologist

6. Test Type: 96 hour LC50
   - Test Material: Bravo® W-75 (Formulated product)
   - Test Species: Bluegill

7. Results
   96-hour for Bravo® W-75 = 0.167 ppm

8. Conclusion: This test is scientifically sound but does not fulfill guideline requirements for acute toxicity test with a formulated product. It does show that Bravo® W-75 is highly toxic to fish.
Methods

Twenty bluegill (35 to 75 mm in length) were tested at 6 concentrations (0.037, 0.056, 0.087, 0.14, 0.21, 0.32 ppm). The fish were divided and tested ten each in separate 15 liter containers. No control was reported. The test material was Bravo® W-75 formulated product which is 75% chlorothalonil. The test was conducted for 96 hours, but the raw mortality presented is for 24 hrs only.

Results

<table>
<thead>
<tr>
<th>Concentration (ppm)</th>
<th>Test 1</th>
<th>Test 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.037</td>
<td>10/0</td>
<td>10/0</td>
</tr>
<tr>
<td>0.056</td>
<td>10/0</td>
<td>10/0</td>
</tr>
<tr>
<td>0.087</td>
<td>10/0</td>
<td>10/0</td>
</tr>
<tr>
<td>0.14</td>
<td>10/0</td>
<td>10/1</td>
</tr>
<tr>
<td>0.21</td>
<td>10/4</td>
<td>10/10</td>
</tr>
<tr>
<td>0.32</td>
<td>10/10</td>
<td>10/10</td>
</tr>
</tbody>
</table>

LC50 = 0.223 ppm  
LC50 = 0.18 ppm

The following is the combined results in ppm:

<table>
<thead>
<tr>
<th>Test Period</th>
<th>LC10</th>
<th>LC50</th>
<th>LC90</th>
</tr>
</thead>
<tbody>
<tr>
<td>24 hr.</td>
<td>.16</td>
<td>.223</td>
<td>.31</td>
</tr>
<tr>
<td>48 hr.</td>
<td>.14</td>
<td>.18</td>
<td>.23</td>
</tr>
<tr>
<td>96 hr.</td>
<td>.127</td>
<td>.167</td>
<td>.22</td>
</tr>
</tbody>
</table>

Bravo® W-75 is highly toxic to fish.

Conclusion

Category: Supplemental

Rationale: The mortality data for 96-hours is not available.

Reparable: This test can be upgraded if the raw mortality is made available.