



UNITED STATES  
ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

BIOLOGICAL REPORT OF ANALYSIS

5-15-81  
1. SAMPLE NO.  
MB 645

2. DATE COLLECTED  
N/A

3. REGION  
N/A

SAMPLE IDENTIFICATION

4. LOT OR CODE NO(S).  
None

5. EPA REGISTRATION NO.  
None

6. ESTABLISHMENT NO.  
None

7. PRODUCT NAME  
Baquacil technical

8. PRODUCER NAME AND ADDRESS (Include ZIP code)  
N/A

9. DEALER NAME AND ADDRESS (Include ZIP code)

|                   |              |              |      |                |
|-------------------|--------------|--------------|------|----------------|
| 10. PHYSICAL FORM | EMULS. CONC. | PRESS. SPRAY | DUST | GRANULAR       |
|                   | WET. POWDER  | AEROSOL      | BAIT | X OTHER liquid |

11. INGREDIENTS

A 20% solution of active ingredient.

TEST

12. TYPE OF TEST  
Static jar  
Test #2746

13. TEST ORGANISM(S)  
Rainbow trout (Salmo gairdneri)  
Average weight: 0.461 gms.  
Source: Wytheville National Fish Hatchery

14. METHOD NO. OPTS 1.206  
15. DURATION 96 hours  
16. CONCENTRATION 0.036-0.26ppm  
17. DILUENT water

18. SUMMARY  
Concentration of active ingredient  
24 hour LC50 0.22 ppm. 95% confidence interval 0.20 to 0.25 ppm.  
48 hour LC50 0.12 ppm. 95% confidence interval 0.11 to 0.14 ppm.  
96 hour LC50 0.11 ppm. 95% confidence interval 0.09 to 0.13 ppm.

19. RESULTS

|                   | Concentration (ml/l): Mortality given below |       |      |      |       |      |
|-------------------|---------------------------------------------|-------|------|------|-------|------|
| Total formulation | 1.3                                         | 0.78  | 0.48 | 0.30 | 0.18  | C    |
| Active ingredient | 0.26                                        | 0.16  | 0.1  | 0.06 | 0.036 |      |
| 24 hours          | 8/10                                        | 0/10  | 0/10 | 0/10 | 0/10  | 0/10 |
| 48 hours          | 10/10                                       | 9/10  | 1/10 | 0/10 | 0/10  | 0/10 |
| 72 hours          | 10/10                                       | 9/10  | 3/10 | 0/10 | 0/10  | 0/10 |
| 96 hours          | 10/10                                       | 10/10 | 3/10 | 0/10 | 0/10  | 0/10 |

Concentration of Baquacil declined from 1.2 ppm to 0.8 ppm after 72 hours.

20. TESTER'S INITS.  
D.N.

21. SIGNATURE OF LAB SUPERVISOR  
Steve Palmer

22. LABORATORY  
Terrestrial and Aquatic Biology

23. DATE  
5/15/81



Rec. 5-19-81

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

~~WASHINGTON, D.C. 20460~~  
Beltsville, Maryland 20705

OFFICE OF TOXIC SUBSTANCES  
Terrestrial and Aquatic  
Biology Unit

May 15, 1981

MEMORANDUM

SUBJECT: Ninety-six Hour LC50 for Technical Baquacil

FROM: Jim Tompkins *JTS*  
Fishery Biologist (TS 768-C)

TO: Curtis Laird  
Aquatic Test Coordinator (TS 769-C)

Find enclosed the results of a 96-hour static jar test for rainbow trout exposed to technical baquacil. The 96-hour LC50 for rainbow trout is 0.11 ppm vs 0.34 ppm for bluegill. One of the reasons for baquacil being more toxic to rainbow trout may be that baquacil breaks down at 22°C at a rate three times faster than it breaks down at 12°C. In a test run at 22°C, the concentration of baquacil declined from 1.2 ppm to 0.75 ppm in 24 hours. At a temperature of 12°C the concentration of baquacil declined from 1.2 ppm to 0.8 ppm in 72 hours.

The concentration of baquacil was not measured in the rainbow trout test because the chemical method works for concentrations of baquacil above 1 ppm.

111801

2



UNITED STATES  
ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

BIOLOGICAL REPORT OF ANALYSIS

1. SAMPLE NO.

MB 645

2. DATE COLLECTED

N/A

3. REGION

N/A

SAMPLE IDENTIFICATION

4. LOT OR CODE NO(S).

None

5. EPA REGISTRATION NO.

None

6. ESTABLISHMENT NO.

None

7. PRODUCT NAME

Baquacil technical

8. PRODUCER NAME AND ADDRESS (Include ZIP code)

N/A

9. DEALER NAME AND ADDRESS (Include ZIP code)

10. PHYSICAL FORM

EMULS. CONC.

PRESS. SPRAY

DUST

GRANULAR

WET. POWDER

AEROSOL

BAIT

X OTHER liquid

11. INGREDIENTS

A 20% solution of active ingredient. Actual concentration between 19 to 20%.

TEST

12. TYPE OF TEST

Flow through  
Test # 2469

13. TEST ORGANISM(S)

Bluegill (Lepomis macrochirus)

Average wt: 0.76 gms.

Source: Harrison Lake National Fish

14. METHOD NO. None

15. DURATION 96 hrs

16. CONCENTRATION 0.375 - 6ppm

17. DILUENT water

18. SUMMARY

Hatchery

Concentration based on total formulation.

96 hr LC50 2.2 ppm. 95% confidence interval 1.93 to 2.33 ppm.

19. RESULTS

| Time   | Concentration ppm (ml/l) |       |      |      |       |      | Mortality given below |
|--------|--------------------------|-------|------|------|-------|------|-----------------------|
|        | 6                        | 3     | 1.5  | 0.75 | 0.375 | C    |                       |
| 24 hrs | 20/20                    | 2/20  | 0/20 | 0/20 | 0/20  | 0/20 |                       |
| 48 hrs |                          | 12/20 | 1/20 | 0/20 | 0/20  | 0/20 |                       |
| 72 hrs |                          | 18/20 | 1/20 | 0/20 | 0/20  | 0/20 |                       |
| 96 hrs |                          | 19/20 | 1/20 | 0/20 | 0/20  | 0/20 |                       |

Previous static jar test 1.5 ppm killed 2/10 fish, 0.9 ppm killed 0/10 in 96 hours.

Chemical samples awaiting analysis.

20. TESTER'S INITS.

D N

21. SIGNATURE OF LAB SUPERVISOR

Steve Calmator

22. LABORATORY

Terrestrial & Aquatic Biology

23. DATE

12/30/80