

4-1-80

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
CHEMICAL and BIOLOGICAL INVESTIGATIONS BRANCH

DATE: April 1, 1980

SUBJECT: Terrestrial and Aquatic Biology Laboratory Work on "Rid-O-Mil 5% WP"

FROM: John A. McCann, ^{Jam} Section Head, BHTS TS-768

TO: Sandra Advard
Information Services Branch
Program Support Division TS-757

Rid-O-Mil 5% WP was tested in static jars--5 rainbow trout in each of two jars, and 10 bluegill in another jar. The jars were treated with 200 ppm of the chemical (direct application). The water became very cloudy with some precipitate forming. It was impossible to see all of the fish without disturbing the jar. When the jar was stirred, it was possible to see the fish--none appeared to be dead. In the jar containing the 10 bluegill, it was possible to see the fish by the 72-hour reading. No fish died during these studies with Rid-O-Mil 5% WP.

The DO was 7.0 in one of the trout jars in 96 hours and 5.4 in the bluegill tank by 96 hours. The trout averaged 1.7 g in weight and 57.5 mm in length. The bluegill averaged 0.67 g in weight and 38.8 mm in length.

Under the conditions of this preliminary test, Rid-O-Mil 5% WP does not appear to be toxic to either rainbow trout or bluegill at 200 ppm.



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

BIOLOGICAL REPORT OF ANALYSIS

IR 575

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

Ridomil 2Z

8. PRODUCER NAME AND ADDRESS (Include ZIP code)

Ciba-Geigy
Greensboro, North Carolina

9. DEALER NAME AND ADDRESS (Include ZIP code)

10. PHYSICAL FORM

EMULS. CONC.

WET. POWDER

PRESS. SPRAY

AEROSOL

DUST

BAIT

GRANULAR

X OTHER liquid

11. INGREDIENTS

N-(2,6-dimethylphenyl)-N-(methoxyacetyl)-alanine methyl ester

Ridomil 2Z

TEST

12. TYPE OF TEST

Static jar
Test #2411

13. TEST ORGANISM(S)

Bluegill (*Lepomis macrochirus*)

Average weight: .7 grams

Source: Harrison Lake National Fish

Hatchery

14. METHOD NO. TSD 1.206

15. DURATION 96 hrs

16. CONCENTRATION 25-35 ppm

17. DILUENT Direct

18. SUMMARY

Concentration based on total formulation.

96-hour LC50 is 27 ppm (95% confidence interval 23.6 to 30.8 ppm).

19. RESULTS

Concentration in ppm (percentage mortality given below)

Time	Slope	Chi 2	35	30	25	C
24 hrs	1.239	0.15	100	70	30	0
48 hrs			100	70	40	0
72 hrs			100	70	40	0
96 hrs.	1.239	0.15	100	70	40	0

Ten fish per concentration.

Loading rate 0.5 g fish/liter.

20. TESTER'S INITS.

21. SIGNATURE OF LAB SUPERVISOR

22. LABORATORY

Animal Biol. Lab.

23. DATE

7/20/76

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ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

BIOLOGICAL REPORT OF ANALYSIS

1. 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

Ridomil Tech

8. PRODUCER NAME AND ADDRESS (Include ZIP code)

Ciba-Geigy
Greensboro, North Carolina

9. DEALER NAME AND ADDRESS (Include ZIP code)

10. PHYSICAL FORM

EMULS. CONC.

PRESS. SPRAY

DUST

GRANULAR

WET. POWDER

AEROSOL

BAIT

X

OTHER

brown

powder

11. INGREDIENTS

N-(2,6-dimethylphenyl)-N-(methoxyacetyl)-alanine methyl ester)

Technical Ridomil 95.1%

TEST

12. TYPE OF TEST

Static jar
Test #2413

13. TEST ORGANISM(S)

Bluegill (*Lepomis macrochirus*)
Average weight: .88 gms.
Source: Harrison Lake National Fish
Hatchery

14. METHOD NO. TSD 1.206

15. DURATION 96 hr

16. CONCENTRATION 24-300 ppm

17. DILUENT Acetone

18. SUMMARY

Information based on total formulation.
96 hr LC50 is 139 ppm.

19. RESULTS

Concentration ppm (percent mortality given below)

Time	300	180	108	65	40	24	C
24 hrs	10	0	0	0	0	0	0
48 hrs	100	100	0	0	0	0	0
72 hrs	100	100	0	0	0	0	0
96 hrs	100	100	0	0	0	0	0

Ten fish per concentration.
Concentration of Ridomil

Dissolved O₂ levels in ppm

	0 hrs	24 hrs	48 hrs	96 hrs
Control	6.0	3.8	1.8	0.8
103 ppm	6.1	3.1	1.4	0.4

Loading rate of fish 0.59 g/liter of water.

20. TESTER'S INITS.

21. SIGNATURE OF LAB SUPERVISOR

22. LABORATORY

Terrestrial & Aquatic Biology 7/24/74

23. DATE

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BIOLOGICAL REPORT OF ANALYSIS

2. DATE COLLECTED

N/A

3. REGION

N/A

SAMPLE IDENTIFICATION

4. LOT OR CODE NO(S).
None5. EPA REGISTRATION NO.
None6. ESTABLISHMENT NO.
None

7. PRODUCT NAME

Ridomil Tech

8. PRODUCER NAME AND ADDRESS (Include ZIP code)

Ciba-Geigy
Greensboro, North Carolina

9. DEALER NAME AND ADDRESS (Include ZIP code)

10. PHYSICAL FORM

EMULS. CONC.

WET. POWDER

PRESS. SPRAY

AEROSOL

DUST

BAIT

GRANULAR

X OTHER brown

powder

11. INGREDIENTS

N-(2,6-dimethylphenyl)-N-(methoxyacetyl)-alanine methyl ester)

Technical Ridomil 95.1%

TEST

12. TYPE OF TEST

Static jar
Test #2414

13. TEST ORGANISM(S)

Rainbow trout (*Salmo gairdneri*)

Average weight: 1.680 gm.

Source: Wytheville National Fish

Hatchery

14. METHOD NO. TSD 1.206

15. DURATION 96 hrs

16. CONCENTRATION 24-180 ppm

17. DILUENT Acetone

18. SUMMARY

Information based on total formulation

96 hr LC50 is 132 ppm (95% confidence interval 103.05 to 169.08 ppm)

19. RESULTS

Concentration in ppm (percent mortality given below)

Time	Slope	Chi 2	180	108	65	40	24	C
24 hr			100	0	0	0	0	0
48 hr			100	0	0	0	0	0
72 hr			100	0	0	0	0	0
96 hr	1.327	0.08	100	20	0	0	0	0

Ten fish per concentration.

Loading rate fish/water volume 0.56g/l

20. TESTER'S INITS.

21. SIGNATURE OF LAB SUPERVISOR

22. LABORATORY

Terrestrial & Aquatic Biology

23. DATE

7/24/79

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ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

BIOLOGICAL REPORT OF ANALYSIS

MB 576

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

Ridomil Tech

8. PRODUCER NAME AND ADDRESS (Include ZIP code)

Ciba-Geigy
Greensboro, North Carolina

9. DEALER NAME AND ADDRESS (Include ZIP code)

10. PHYSICAL FORM

EMULS. CONC.

PRESS. SPRAY

DUST

GRANULAR

WET. POWDER

AEROSOL

BAIT

OTHER brown

11. INGREDIENTS

powder

N-(2,6-dimethylphenyl)-N-(methoxyacetyl)-alanine methyl ester)

Ridomil 95.1%

TEST

12. TYPE OF TEST

Static jar
Test #2415

13. TEST ORGANISM(S)

Daphnia magna
Source: TABU stock culture

14. METHOD NO. TSP 1.206

15. DURATION 48 hrs

16. CONCENTRATION 26-200 ppm

17. DILUENT Acetone

18. SUMMARY

Concentrations based on total formulation.

48 hr EC50 is 121 ppm (95% confidence interval 80.5 to 181.8 ppm)

19. RESULTS

Concentration in ppm (percent mortality given below)

Time	Slope	Chi 2	200	120	72	43	26	SC	C
24 hrs			20	10	10	0	0	0	0
48 hrs	2.236	0.166	70	40	40	10	0	0	0

Ten daphnia/concentration.

Daphnia bioassays conducted in reconstituted deionized water with pH 7.8, total alkalinity (bicarbonate) 105 ppm; total hardness (ppm CaCO₃) 215 ppm.

20. TESTER'S INITS.

PM

21. SIGNATURE OF LAB SUPERVISOR

22. LABORATORY

Terrestrial & Aquatic Biology

23. DATE

7/26/79

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

BIOLOGICAL REPORT OF ANALYSIS

MB 575

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

R E domil 2%

8. PRODUCER NAME AND ADDRESS (Include ZIP code)

Ciba-Geigy
Greensboro, North Carolina

9. DEALER NAME AND ADDRESS (Include ZIP code)

10. PHYSICAL FORM

EMULS. CONC.

PRESS. SPRAY

DUST

GRANULAR

WET. POWDER

AEROSOL

BAIT

X

OTHER brown

11. INGREDIENTS

N-(2,6-dimethylphenyl)-N-(methoxyacetyl)-aniline methyl ester

R E domil 2%

liquid

TEST

12. TYPE OF TEST

Static jar
Test #2416

13. TEST ORGANISM(S)

Daphnia magna
Source: TABU stock culture

14. METHOD NO. TSD 1.206

15. DURATION 48 hrs

16. CONCENTRATION 6 - 78 ppm

17. DILUENT Acetone

18. SUMMARY

Concentration based on total formulation.

48 hr EC50 is 12.5 ppm (95% confidence interval 9.9 to 15.3 ppm)

19. RESULTS

Concentration in ppm (percent mortality given below)

Time	Slope	Chi 2	78	47	23	17	10	6	SC	C
24 hrs			100	90	70	50	10	0	0	0
48 hrs	1.303	0.022	100	100	100	90	20	0	0	0

Ten organisms/concentration.

Daphnia bioassays conducted in reconstituted deionized water with pH 7.8, total alkalinity (bicarbonate) 105 ppm; total hardness (ppm CaCO₃) 215 ppm.

20. TESTER'S INITS.

21. SIGNATURE OF LAB SUPERVISOR

22. LABORATORY

Terrestrial & Aquatic Biology

23. DATE

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

BIOLOGICAL REPORT OF ANALYSIS

HB 575

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

Ridomil 2%

8. PRODUCER NAME AND ADDRESS (Include ZIP code)

Ciba-Geigy
Greensboro, North Carolina

9. DEALER NAME AND ADDRESS (Include ZIP code)

10. PHYSICAL FORM

EMULS. CONC.

PRESS. SPRAY

DUST

GRANULAR

WET. POWDER

AEROSOL

BAIT

OTHER ☒ corn

liquid

11. INGREDIENTS

N-(2,6-diethylphenyl)-N-(methoxyacetyl)-alanine methyl ester
Ridomil 2%

TEST

12. TYPE OF TEST

Static jar
Test #2417

13. TEST ORGANISM(S)

Rainbow trout (*Salmo gairdneri*)
Average weight: 1.8 gms (estimated)
Source: Wytheville National Fish

14. METHOD NO. TSD 1.206

15. DURATION 96 hrs

16. CONCENTRATION 2.1 - 25 ppm

17. DILUENT direct add

18. SUMMARY

Hatchery

Concentration based on total formulation.
96 hr LC50 is 13.4 ppm (95% confidence interval 15.03 to 22.45 ppm)

19. RESULTS

Concentration in ppm (percent mortality given below)

Time	Slope	Chi 2	25	15	9	6	3.6	2.1	C
24 hrs	1.242	0.027	100	40	0	0	0	0	0
48 hrs			100	40	0	0	0	0	0
72 hrs			100	40	0	0	0	0	0
96 hrs	1.242	0.027	100	40	0	0	0	0	0

Five fish/concentration.

Loading rate fish/water volume 0.6g/l

20. TESTER'S INITS.

21. SIGNATURE OF LAB SUPERVISOR

22. LABORATORY

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23. DATE

7/27/70

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