

Test No.: 933718
 Test substance : CGA 329351

Sampling
 for analysis : Composite samples of each test concentration were drawn by mixing identical volumes of the test solutions taken from the approximate center of the test vessels. They were taken immediately before the exposure and after 96 hours exposure and kept at -18°C to -22°C until analysis.

3.6. Observations

Mortality was recorded after 2, 4, 24, 48, 72 and 96 hours exposure and is given on table 1.

The fish were examined daily for the symptoms listed on table 2.

3.7. Measurements

The oxygen content, pH and temperature were measured at 0, 24, 48, 72 and 96 hours. For the values see table 3.

Description of analytical determination of test substance concentration in Appendix.

3.8. Calculations / Statistical Analysis

None

Test No.: 933718
 Test substance : CGA 329351

4. Results

Measured test concentrations at the beginning and the end of the exposure period ranged from 94 to 94% of the nominal concentration (see Appendix). Values are therefore based on nominal concentrations. The test substance appeared homogeneously distributed in the test vessel at all test times.

4.1. Values

LC 50 (96 h)	: >100 mg/l
Conf. limits	: none
LC 50 (72 h)	: >100 mg/l
Conf. limits	: none
LC 50 (48 h)	: >100 mg/l
Conf. limits	: none
LC 50 (24 h)	: >100 mg/l
Conf. limits	: none

4.2. Values graphically determined

LC 50 (96 h)	: not determined
--------------	------------------

4.3. Values observed

NOEC (96 h)	: 100 mg/l
LC 0 (96 h)	: 100 mg/l
LC 100 (96 h)	: >100 mg/l

No mortality occurred at the concentration tested and no sublethal effects were observed.

4.4. Controls

Mortalities in blank: 0 %

4.5. Time / Toxicity curve

Due to the results obtained, no time / toxicity curve is available.

4.6 Conclusion

With reference to the 7th Amendment to Directive 67/548/EEC, i.e. Directive 92/32/EEC, the ecotoxicological classification of CGA 329351 is "not toxic to fish".

Test No.: 933718
 Test substance : CGA 329351

5. Tables

Table 1 Mortalities (Initial number of fish: 7 per test concentration)

Conc. nominal mg/l	Mortality Number of dead fish				
	2-4 h	24 h	48 h	72 h	96 h
Blank	0	0	0	0	0
100	0	0	0	0	0

Table 2 Symptoms observed

Conc. nominal mg/l	Swimming behaviour					Loss of equilibrium					Respiratory function					Exophthalmus					Pigmentation				
	2-4	24	48	72	96	2-4	24	48	72	96	2-4	24	48	72	96	2-4	24	48	72	96	2-4	24	48	72	96
Blank	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

- 1: light symptoms
 2: moderate symptoms
 3: severe symptoms

Test No.: 933718
 Test substance : CGA 329351

Table 3 Measurements

Conc. nominal mg/l	0 h			24 h			48 h			72 h			96 h		
	T °C	pH	O2 %	T °C	pH	O2 %	T °C	pH	O2 %	T °C	pH	O2 %	T °C	pH	O2 %
Blank	15	7.7	99	15	7.9	87	15	8.1	97	15	8.2	96	15	8.1	100
100	15	7.7	97	15	8.0	95	15	8.2	95	15	8.2	96	15	8.2	100

T: Temperature

This document is not the property of the Ctgb and only provided based on mandatory freedom of information requirements. rights of third parties. Furthermore, any publication, distribution and use of this document or its contents without the permission of the owner of this document may therefore be prohibited and violate the right of its owner.

Op dit document kunnen een wettelijke verplichting tot openbaarmaking van de inhoud hiervan verboden zijn en een inbreuk opleveren van de rechten van deze rechthebbende.

Voorzien kan dit document onder een regeling omtrent gegevensbescherming worden gepubliceerd, verspreid, of de inhoud hiervan verboden zijn en een inbreuk opleveren van de rechten van deze rechthebbende.

Dit document is geen eigendom van het Ctgb en wordt beschikbaar gemaakt voor gebruik van dit document kunnen een wettelijke verplichting tot openbaarmaking van de inhoud hiervan verboden zijn en een inbreuk opleveren van de rechten van deze rechthebbende.

Test No.: 933718
 Test substance : CGA 329351

Appendix:

Ciba Crop Protection/Residue Analysis Basel/Switzerland

ANALYSIS REPORT ON TEST NO. 933718 (PROJECT NO. OF SPONSOR: 933718)
 CGA 329351 WATER

DETERMINATION OF CGA 329351 IN WATER SPECIMENS FROM ACUTE TOXICITY TEST TO RAINBOW TROUT

1. DESCRIPTION OF SPECIMENS

Refer to protocol of project.
 Arrival of specimens: 20 Jun 1994.
 Storage: at -20°C until analysis.
 Analysis: 29 Sep 1994.

2. ANALYTICAL METHOD

General Analytical Method for "Test Substances Used for Ecotoxicity Studies", Residue Analysis,
 8 Feb. 1988.
 Calculations according to General Calculation Method REM 119.04.

Abstract of the method:

HPLC with UV detection: the injected specimen is preconcentrated and precleaned on a short column (C₁₈) and then transferred onto the analytical HPLC column (C₁₈). The substance is eluted with water-acetonitrile (65 vol. + 35 vol.) and detected at 240 nm.

Details of the method:

The HPLC system is equipped with a short column (1 cm length, 4 mm i.d., packed with Nucleosil 100 C₁₈ 5 µm), a switching valve and an analytical column (12 cm length, 4 mm i.d., packed with Nucleosil 100 C₁₈ 5 µm). 1 mL of the water specimen (appropriately diluted with water if necessary) is injected and transferred onto the short column, where it is preconcentrated and precleaned by washing with water. By means of the switching valve and water-acetonitrile (65 vol. + 35 vol.) as the mobile phase the substance is eluted from the short column and transferred onto the analytical column, from where it is eluted by the mobile phase and detected with an UV detector at 240 nm. CGA 329351 is used as the reference substance.

Quantitation: by alternate injections of water specimens and of reference substance solutions. Interpolation by method of weighted least squares of peak heights, regression of 1st order. From the measured contents of CGA 329351 the corresponding values of the test product were calculated (the product contains 97.3% CGA 329351).

The procedure was checked with recovery experiments at two spike levels. 4.5 ml of the control specimen was spiked with 0.5 ml of an appropriate standard solution of CGA 329351 in water.

Proprietary information of CIBA-GEIGY Ltd. Not to be disclosed to third parties without previous consent of CIBA-GEIGY Ltd.

Test No.: 933718
 Test substance : CGA 329351

Appendix continued:

Ciba
 Test No. 933718

Crop Protection/Residue Analysis

Basel/Switzerland
 page 2 of 2

3. RESULTS

specimen description		nominal conc. CGA 329351 techn. [mg/L]	conc. found CGA 329351 [mg/L]	conc. found (corr.) CGA 329351 techn. [mg/L]	conc. found (corr.) relative to conc. nominal [%]
06 Jun 94	0 h	100	94.3	93.6	94
10 Jun 94	96 h	100	94.5	93.8	94
06 Jun 94	0 h	control	<1.00	<0.99	-
10 Jun 94	96 h	control	<1.00	<0.99	-

Remarks:

- conc. found (corr.): these results are corrected for an average recovery of 103.5 %.

Recoveries:

Spike level 2.0 mg/L CGA 329351 (2.1 mg/L CGA 329351 techn.): 103%
 Spike level 8.0 mg/L CGA 329351 (8.2 mg/L CGA 329351 techn.): 104%

Analyst: P. Forzy

25 NOV 1994

date

5.1.2.9 NCO
 (principal investigator for analytics)

Distribution: Dr. [redacted] (study director)

Original report and raw data in archives of Residue Analysis, PP 2.53.

Dit document is geen eigendom van het Ctgb en wordt beschikbaar gemaakt op grond van een wettelijke verplichting tot openbaarmaking.

Op dit document kunnen rechten van derden rusten, waaronder intellectuele eigendomsrechten en/of auteursrechten. Voorts kan dit document, verspreiding, vermenigvuldiging, commerciële exploitatie vallen. Publicatie, verspreiding, of de inhoud hiervan zonder de toestemming en gebruik van dit document, kan derhalve verboden zijn en een inbreuk opleveren van de rechten van deze rechthebbende.

This document is not the property of the Ctgb and only provided based on mandatory freedom of information requirements.

The document may be subject to rights of third parties. Furthermore, this document may fall under a regulatory data protection regime. Consequently, any publication, distribution, reproduction and/or publishing and any commercial exploitation and use of this document may contents without the permission of the owner of this document may therefore be prohibited and violate the right of its owner.