

MR 280349

October 26, 2004

BEHQ-1004-159598

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Attention: Section 8(e) Coordinator

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Re: **TSCA Section 8(e) Submissions**

Dear Sir/Madam:

3M Company ("3M") requests that EPA place the attached studies in the TSCA Section 8(e) docket. We have included a master index for these studies identifying the study title, test substance and CAS number. A Confidential Business Information (CBI) version of this index and the studies also is being submitted today pursuant to EPA procedures. 3M has not provided CBI substantiation with this submission, but would be willing to do so at the Agency's request.

3M has concluded that data in these studies may not be, strictly speaking, "corroborative" of previously reported or published information as defined in EPA's reporting guidance or otherwise potentially may warrant 8(e) submission based on EPA's reporting guidance.

3M appreciates EPA's attention to this matter. Please contact the undersigned if you have any questions or require further information regarding this submission.

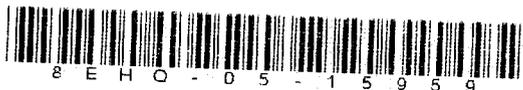
Very truly yours,

*Katherine E. Reed* (974)

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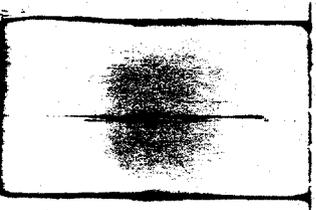
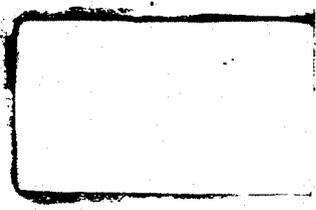
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Master Index to Studies Submitted Under TSCA 8(e) by 3M Company on October 26, 2004  
 (Confidential Business Information Redacted)

Title	Substances	CAS Information
Aquatic Toxicity Data Sheet: 48hr <i>Daphnia Magna</i>	1,4-dioxane; heptadecafluoro-1-octanesulfonic acid; linear n-ethyl perfluorooctanesulfonamide; n-ethylperfluorooctanesulfonamidoethyl alcohol; poly(oxy-1,2-ethanediyl), alpha-1,2- [ethyl]([heptadecafluorooctyl)sulfonylamino]ethyl]-.omega.-hydroxy-; poly(oxy-1,2-ethanediyl), alpha-1,2- [ethyl]([nonafluorobutyl)sulfonylamino]ethyl]-.omega.-hydroxy-; poly(oxy-1,2-ethanediyl), alpha-1,2- [ethyl]([pentafluorohexyl)sulfonylamino]ethyl]-.omega.-hydroxy-; poly(oxy-1,2-ethanediyl), alpha-1,2- [ethyl]([tridecafluorohexyl)sulfonylamino]ethyl]-.omega.-hydroxy-; poly(oxy-1,2-ethanediyl), alpha-1,2- [ethyl]([undecafluoropentyl)sulfonylamino]ethyl]-.omega.-hydroxy-; polyethylene glycol; water	1,4-dioxane (123-91-1); heptadecafluoro-1-octanesulfonic acid (1763-23-1); linear n-ethyl perfluorooctanesulfonamide (4151-50-2); n-ethylperfluorooctanesulfonamidoethyl alcohol (1691-99-2); poly(oxy-1,2-ethanediyl), alpha-1,2-[ethyl]([heptadecafluorooctyl)sulfonylamino]ethyl]-.omega.-hydroxy- (29117-08-6); poly(oxy-1,2-ethanediyl), alpha-1,2-[ethyl]([nonafluorobutyl)sulfonylamino]ethyl]-.omega.-hydroxy- (68298-79-3); poly(oxy-1,2-ethanediyl), alpha-1,2-[ethyl]([pentafluorohexyl)sulfonylamino]ethyl]-.omega.-hydroxy- (68298-81-7); poly(oxy-1,2-ethanediyl), alpha-1,2-[ethyl]([tridecafluorohexyl)sulfonylamino]ethyl]-.omega.-hydroxy- (56372-23-7); poly(oxy-1,2-ethanediyl), alpha-1,2-[ethyl]([undecafluoropentyl)sulfonylamino]ethyl]-.omega.-hydroxy- (68298-80-6); polyethylene glycol (25322-68-3); water (7732-18-5)
Multigeneration Daphnid Life Cycle Test	1,4-dioxane; heptadecafluoro-1-octanesulfonic acid; linear n-ethyl perfluorooctanesulfonamide; n-ethylperfluorooctanesulfonamidoethyl alcohol; poly(oxy-1,2-ethanediyl), alpha-1,2- [ethyl]([heptadecafluorooctyl)sulfonylamino]ethyl]-.omega.-hydroxy-; poly(oxy-1,2-ethanediyl), alpha-1,2- [ethyl]([nonafluorobutyl)sulfonylamino]ethyl]-.omega.-hydroxy-; poly(oxy-1,2-ethanediyl), alpha-1,2- [ethyl]([pentafluorohexyl)sulfonylamino]ethyl]-.omega.-hydroxy-; poly(oxy-1,2-ethanediyl), alpha-1,2- [ethyl]([tridecafluorohexyl)sulfonylamino]ethyl]-.omega.-hydroxy-; poly(oxy-1,2-ethanediyl), alpha-1,2- [ethyl]([undecafluoropentyl)sulfonylamino]ethyl]-.omega.-hydroxy-; polyethylene glycol; water	1,4-dioxane (123-91-1); heptadecafluoro-1-octanesulfonic acid (1763-23-1); linear n-ethyl perfluorooctanesulfonamide (4151-50-2); n-ethylperfluorooctanesulfonamidoethyl alcohol (1691-99-2); poly(oxy-1,2-ethanediyl), alpha-1,2-[ethyl]([heptadecafluorooctyl)sulfonylamino]ethyl]-.omega.-hydroxy- (29117-08-6); poly(oxy-1,2-ethanediyl), alpha-1,2-[ethyl]([nonafluorobutyl)sulfonylamino]ethyl]-.omega.-hydroxy- (68298-79-3); poly(oxy-1,2-ethanediyl), alpha-1,2-[ethyl]([pentafluorohexyl)sulfonylamino]ethyl]-.omega.-hydroxy- (68298-81-7); poly(oxy-1,2-ethanediyl), alpha-1,2-[ethyl]([tridecafluorohexyl)sulfonylamino]ethyl]-.omega.-hydroxy- (56372-23-7); poly(oxy-1,2-ethanediyl), alpha-1,2-[ethyl]([undecafluoropentyl)sulfonylamino]ethyl]-.omega.-hydroxy- (68298-80-6); polyethylene glycol (25322-68-3); water (7732-18-5)
Aquatic Invertebrate Testing - Alkyltins LR 8024-1 Aquatic Invertebrate Testing - Decosheen Material (LR-8052) R Scratch Remover (Fathead Minnow) S Scratch Remover (Fathead Minnow) Octanol Water Partition Coefficient	Alkyltins: dibutyltin laurate and dibutyltin-di(2 ethylhexoate) Decosheen Ribbon Materials and pigments: Decosheen Blue in Green Ceres Blue ZV; Decosheen Gold Paste Pigment; Decosheen Royal Blue, Solvent Blue 55-65% Water; 20-30% Stoddard Solvent; 1-5% Sodium Silicate; 1-5% Potassium Hydroxide; 0.1-3% Nonylphenoxypoly(oxyethylene)ethanol 60-70% Water; 20-30% Stoddard Solvent; 1-5% Sodium Silicate; 0.1-3% Turgitol NP-33 N-methylperfluorooctane sulfonamidoethanol	Dibutyltin laurate (CAS 77-58-7); Dibutyltin-di(2 ethylhexoate) (CAS 2781-10-4) Decosheen Blue in Green Ceres Blue ZV (CAS 61814-09-3); Decosheen Royal Blue, Solvent Blue (CAS 61814-09-3); Decosheen Gold Paste Pigment (CAS Number 61814-09-3) Water (CAS 7732-18-5); Stoddard Solvent (CAS 8052-41-3); Sodium Silicate (CAS 1344-09-8); Potassium Hydroxide (CAS 1310-58-3); Nonylphenoxypoly(oxyethylene)ethanol (CAS 9016-45-9) Water (CAS 7732-18-5); Stoddard Solvent (CAS 8052-41-3); Sodium Silicate (CAS 1344-09-8); Turgitol NP-33 (CAS 9016-45-9) CAS 24448-09-7

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Master Index to Studies Submitted Under TSCA 8(e) by 3M Company on October 26, 2004  
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Title	Substance Information	CAS Information
CoCl <sub>2</sub> .6H <sub>2</sub> O as Co <sup>2+</sup> Toxicity to Microtox Reagent	Cobalt (as Co <sup>2+</sup> ion) (CoCl <sub>2</sub> .6H <sub>2</sub> O)	CAS 7791-13-1
Activated Sludge Respiration Inhibition Test on CoCl <sub>2</sub> .6H <sub>2</sub> O as Co ion	Cobalt (as Co <sup>2+</sup> ion) (CoCl <sub>2</sub> .6H <sub>2</sub> O)	CAS 7791-13-1
Acute Toxicity of CoCl <sub>2</sub> .6H <sub>2</sub> O as Co ion to <i>Daphnia magna</i> under Static Exposure Conditions	Cobalt (as Co <sup>2+</sup> ion) (CoCl <sub>2</sub> .6H <sub>2</sub> O)	CAS 7791-13-1
Acute Toxicity of CoCl <sub>2</sub> .6H <sub>2</sub> O as Co ion to Fathead Minnow under Static Exposure Conditions	Cobalt (as Co <sup>2+</sup> ion) (CoCl <sub>2</sub> .6H <sub>2</sub> O)	CAS 7791-13-1
Freshwater Algae Growth Inhibition Test	Cobalt (as Co <sup>2+</sup> ion) (CoCl <sub>2</sub> .6H <sub>2</sub> O)	CAS 7791-13-1
<i>Daphnia magna</i> 21-Day Chronic Reproduction Study	N-ethylperfluorooctane sulfonamidoethanol	CAS 1691-99-2
Plant Growth Effects of [ ]	[ ]	[ ]
Final Report ( <i>Daphnia</i> and Microtox)	Monomethyl ether of hydroquinone	CAS 150-76-5
Microtox Test Results	2-Ethylhexyl Acrylate; Isooctyl Acrylate Monomer; 2-Methylbutyl acrylate; Methyl Isoamyl acrylate; Isooctyl Acrylate	2-Ethylhexyl Acrylate (CAS 103-11-7); Isooctyl Acrylate Monomer (CAS 29590-42-9) 2-Methylbutyl acrylate (CAS 44914-03-6); Methyl Isoamyl acrylate (CAS 18993-92-1); Isooctyl Acrylate (CAS 29590-42-9)
Phytotoxicity Test Results	[ ]	[ ]

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Title	Substance Information	CAS Information
Plant Toxicity Comparison, Young Seedling Growth	[ ]	[ ]
<i>Ceriodaphnia dubia</i> Survival and Reproduction exposed to Opequon Creek Water Spiked with BETZ 1110 Polymer (November 4, 1987 sample) for seven days under static renewal conditions	BETZ 1110: Non-3M Product - Chemical composition not provided to 3M by manufacturer	MSDS provided by manufacturer states product is "not hazardous" and not "considered to be a carcinogen"
<i>Ceriodaphnia dubia</i> Survival and Reproduction exposed to Opequon Creek Water Spiked with Betz 1138 Polymer (November 4, 1987 sample) for seven days under static renewal conditions	BETZ 1138: Non-3M Product - Chemical composition not provided to 3M by manufacturer	MSDS provided by manufacturer states product is "not hazardous" and not "considered to be a carcinogen"
Toxicity of 1,6 - Hexanedio Diacrylate to <i>Daphnia magna</i>	1,6 Hexanedio diacrylate	CAS 13048-33-4
<i>Daphnia magna</i> Chronic Bioassay Under Static Renewal Conditions	Methyl isoamyl acrylate	CAS 18993-92-1
Estimating the Chronic Toxicity of Nalclear 7177 to <i>Ceriodaphnia</i> Survival and Reproduction Using Short-Term Tests	Nalclear 7177 wastewater treatment acrylamide/acrylate polymer - Chemical composition not provided to 3M by manufacturer	CAS Information not provided to 3M by manufacturer
Acute Toxicity of Isooctyl Acrylate to <i>Daphnia magna</i>	Isooctyl Acrylate Monomer	CAS 29590-42-9
Static Acute Toxicity of [ ] to the Daphnid, <i>Daphnia magna</i>	Tolylthiazole	CAS 29385-43-1
Static Acute Toxicity of [ ] to the Alga, <i>Selenastrum capricornutum</i>	Tolylthiazole	CAS 29385-43-1
Static Acute Toxicity of [ ] to the Daphnid, <i>Daphnia magna</i>	[ ]	[ ]
Static Acute Toxicity of [ ] to the Fathead Minnow, <i>Pimephales promelas</i>	[ ]	[ ]
Static Acute Toxicity of [ ] to the Daphnid, <i>Daphnia magna</i>	water; propylene-tetrafluoroethylene polymer; tert-butyl alcohol	water (7732-18-5); propylene-tetrafluoroethylene polymer (27029-05-6); tert-butyl alcohol (75-65-0)

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Title	Substance Information	CAS Information
Isooctyl acrylate: Fish, Acute Toxicity Test	Isooctyl Acrylate Monomer	CAS 29590-42-9
Isooctyl Acrylate: <i>Daphnia</i> sp. Acute Immobilization Test	Isooctyl Acrylate Monomer	CAS 29590-42-9
Isooctyl Acrylate: Alga, Growth Inhibition Test	Isooctyl Acrylate Monomer	CAS 29590-42-9
Isooctyl Acrylate: <i>Daphnia</i> sp. Reproduction Test	Isooctyl Acrylate Monomer	CAS 29590-42-9
Acute Toxicity of [ ] to the mysid, <i>Mysidopsis bahia</i>	[ ]	[ ]
Final Report (Microtox)	[ ]	[ ]
Determination of the Partition Coefficient (N-Octanol/Water) of T-5896 by High Performance Liquid Chromatography (HPLC)	N-methyl perfluorooctane sulfonamido ethanol; N-methyl perfluorooctane sulfonamideethyl acrylate	N-methyl perfluorooctane sulfonamido ethanol (CAS 25268-77-3); N-methyl perfluorooctane sulfonamideethyl acrylate (CAS 24448-09-7)
OECD Activated Sludge Respiration Inhibition Test Results	N-Dodecyltrimethylammonium chloride	CAS = 112-00-5
Final Report (Fish Acute Toxicity)	Miralaine CB (30% Cocamidopropyl betaine = Amides, coco, N-(3-(dimethylamino)propyl), alkylation products with chloroacetic acid, sodium salts, 70% Water and Inerts), Miralaine COB (30% Coco/Oleamidopropyl Betaine = 1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-coco acyl derivs., inner salt)	Cocamidopropyl betaine (CAS 70851-07-9); Coco/Oleamidopropyl Betaine (CAS 61789-40-0)
A Flow-Through Life-Cycle Toxicity Test With the Saltwater Mysid ( <i>Mysidopsis bahia</i> )	Perfluorooctane sulfonate	CAS 1763-23-1
Lithium: Alga, Acute toxicity Tests	Lithium Chloride	CAS 7447-41-8
An Early Life-Stage Toxicity Test With the Fathead Minnow ( <i>Pimephales promelas</i> )	Perfluorooctane sulfonate	CAS 1763-23-1
Lithium: Fish, Acute toxicity Tests	Lithium Chloride	CAS 7447-41-8
Lithium: <i>Daphnia</i> , Acute toxicity Tests	Lithium Chloride	CAS 7447-41-8
Summary of Toxicity Testing on OSCl and OSF	Octane sulfonyl chloride and Octane sulfonyl fluoride	Octane sulfonyl fluoride (CAS 7795-95-1); Octane sulfonyl chloride (CAS 4063-63-5)
Toxicity to Microtox Test	Lauryldimethylamineoxide	CAS 1643-20-5

Master Index to Studies Submitted Under TSCA 8(e) by 3M Company on October 26, 2004  
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Title	Substance Information	CAS Information
Ecotoxicological Testing of CoCl <sub>2</sub> ·6H <sub>2</sub> O as Co <sup>2+</sup> ion (Seed Germination and Root Elongation)	Cobalt (as Co <sup>2+</sup> ion) (CoCl <sub>2</sub> ·6H <sub>2</sub> O)	CAS 7791-13-1

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Study Title

Static Acute Toxicity of [ ]  
to the Alga, *Selenastrum capricornutum*

Authors

Robert L. Boeri  
Timothy J. Ward

Study Completed

June, 1991

Performing Laboratory

EnviroSystems Division  
Resource Analysts, Incorporated  
P.O. Box 2130  
One Lafayette Road  
Hampton, New Hampshire 03842

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I. SUMMARY

The acute toxicity of [ ] to the alga, *Selenastrum capricornutum*, is described in this final report. The test was conducted for 3M Company for 96 hours during April 30 to May 4, 1991, at the EnviroSystems Division of Resource Analysts, Inc. in Hampton, New Hampshire. It was conducted by Jeanne Magazu, Peter Kowalski, Ellen Stanford, Robert Boeri, and Timothy Ward.

The test was performed under static conditions with five concentrations of test substance and a dilution water control at a mean temperature of 23.3°C. The dilution water was synthetic media prepared with sterile deionized water. Flasks were incubated on a rotary shaker. Light was adjusted to 35  $\mu\text{Ein}/\text{sec}/\text{m}^2$  with a photoperiod of 24 hours light and 0 hours dark. Nominal concentrations of [ ] were: 0 mg/L (control), 62.5 mg/L, 125 mg/L, 250 mg/L, 500 mg/L, and 1,000 mg/L. Nominal concentrations were used for all calculations.

Algae used in the test was from an in-house culture that was maintained under test conditions. Exposure of algae to the test substance resulted in a 72 hour EC50 less than 62.5 mg/L [ ] and a no observed effect concentration (NOEC) of 250 mg/L. The 96 hour EC50 and NOEC are 87 mg/L and 250 mg/L, respectively.

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#### IV. INTRODUCTION

This study was sponsored by 3M Company, St. Paul, Minnesota. The objective of the study was to determine the acute toxicity of [redacted] to a freshwater alga. The report contains sections that describe the methods and materials employed in the study, and the results of the investigation. The report also contains an appendix that presents the water quality data collected during the test.

#### V. METHODS AND MATERIALS

##### TEST SUBSTANCE:

[redacted] (EnviroSystems Sample Number 2694E) was delivered to EnviroSystems on November 15, 1990. It was contained in a 250 mL glass bottle that was labelled with the following information: [redacted] (white granules) was supplied by 3M Company, 935 Bush Avenue, St. Paul, Minnesota. Prior to use the test material was stored in the dark at room temperature. A reserve sample (approximately 1.2 grams) will be archived at EnviroSystems for a minimum of 10 years.

##### DILUTION WATER:

Water used for acclimation of test organisms and for all toxicity testing was sterile enriched media (U.S. EPA, 1978) with a pH of approximately 8.0. Results of chemical analysis of a representative sample of deionized water used to prepare the media are presented in Table 1.

##### TEST ORGANISM:

Algae used for the test was from a culture originally procured from the Culture Collection of Algae at the University of Texas at Austin and delivered to EnviroSystems on April 12, 1990. The identity of the culture was verified using an appropriate taxonomic key. The culture was transferred to sterile enriched media identical to media used for this test and maintained at test conditions.

##### TOXICITY TESTING:

The definitive toxicity test was performed during April 30 to May 4, 1991. It is based on procedures of the OECD (1984). The test was conducted at a target temperature of  $22 \pm 2^\circ\text{C}$  with five concentrations of test substance and a dilution water control. A 1,000 mg/L stock solution was prepared in dilution water. The stock solution was added directly to dilution water contained in the test vessels without the use of a solvent. Nominal concentrations of the test material were: 0 mg/L (control), 62.5 mg/L, 125 mg/L, 250 mg/L, 500 mg/L, and 1,000 mg/L.

Table 1. Chemical characterization of a representative sample of deionized water used to prepare test media for toxicity test

Parameter	Unit of Measurement	Reporting Limit	Measured Value
Organochlorine pesticides	ug/L	2	ND
Organophosphorus pesticides	ug/L	0.5	ND
Polychlorinated biphenyls	ug/L	0.5	ND

Note: ND = not detected at or above the reporting limit.

Algae was randomly and equally distributed among three replicates of each treatment at the rate of 10,000 cells/ml. The test was performed in 250 ml glass Erlenmeyer flasks that contained 100 ml of test solution. The flasks were capped with inverted glass beakers. Test vessels were randomly arranged on a rotary shaker in an incubator during the 96 hour test (a random numbers table was used to select the location of each vessel). A 24 hour light and 0 hour dark photoperiod was maintained with cool-white fluorescent lights that provided a light intensity of  $35 \mu\text{Es}^{-1}\text{m}^{-2}$ .

The number of algal cells/ml in each test vessel was determined visually every 24 hours by means of direct microscopic counts with a hemacytometer. The pH (Beckman model PHI 12 meter) was determined in each test flask at the beginning and end of the test, and temperature (ASTM mercury thermometer) was measured and recorded daily in the incubator.

#### STATISTICAL METHODS:

Results of the toxicity test were interpreted by standard statistical techniques (Stephan, 1983). The binomial or moving average method was used by the author to calculate EC50 values using nominal concentrations of test substance. The NOEC was calculated using Dunnett's test, which includes a parametric one-way analysis of variance (ANOVA). The average specific growth rate was calculated as the natural log of the number of cells per ml at 96 hours minus the natural log of the number of cells per ml at 0 hours divided by the exposure period. The percent change from control is calculated by subtracting the sample average specific growth rate from the control average specific growth rate, dividing that value by the average specific growth rate in the control and multiplying that value by 100. The percent change from control was used to compute EC50 and NOEC values.

## VI. RESULTS

Biological and water quality data generated by the acute toxicity test are presented in Table 2 and Appendix A, respectively, and the percent of control and average specific growth rate information is presented in Table 3.

The 24, 48, 72, and 96 hour EC50s for algae exposed to [ ] are presented in Table 4. The 72 hour EC50 is 62.5 mg/L, and the 72 hour NOEC is 250 mg/L [ ] The 96 hour EC50 is 87 mg/L and the 96 hour NOEC is 250 mg/L.

Table 2. Growth data from toxicity test

Nominal Concentration (mg/L)	rep.	Number of Cells per Milliliter x 10 <sup>3</sup> (hour)				
		0	24	48	72	96
0.0 (control)	1	10	12	48	134	345
	2	10	20	70	162	316
	3	10	18	66	186	304
	mean	10	17	61	161	322
62.5	1	10	30	36	22	102
	2	10	16	25	30	62
	3	10	20	28	36	96
	mean	10	22	30	29	87
125	1	10	28	4	24	22
	2	10	24	6	28	36
	3	10	26	10	26	24
	mean	10	26	7	26	27
250	1	10	20	5	14	20
	2	10	28	4	12	18
	3	10	20	6	10	14
	mean	10	23	5	12	17
500	1	10	14	8	8	10
	2	10	18	10	4	8
	3	10	20	8	8	8
	mean	10	17	9	7	9
1,000	1	10	22	12	2	8
	2	10	10	8	4	6
	3	10	10	10	2	2
	mean	10	14	10	3	5

Table 3. Percent change from control and average specific growth rate from toxicity test

Nominal Concentration of Test Substance (ng/L)	Average specific growth rate				Percent change from control			
	24hr	48hr	72hr	96hr	24hr	48hr	72hr	96hr
0.0 (control)	0.022	0.038	0.039	0.036	0	0	0	0
62.5	0.033	0.023	0.015	0.023	50	39	62	36
125	0.040	0.000	0.013	0.011	82	100	67	69
250	0.034	0.000	0.003	0.006	54	100	92	83
500	0.023	0.000	0.000	0.000	4	100	100	100
1,000	0.014	0.000	0.000	0.000	36	100	100	100

Table 4. Median effective concentrations (EC50s) from toxicity test

Exposure period	EC50	95 percent confidence limits	Calculation method
24 hours	>1,000 mg/L	--	--
48 hours	68 mg/L	62 - 125 mg/L	binomial
72 hours	<62.5 mg/L	--	--
96 hours	87 mg/L	73 - 99 mg/L	probit

## VII. REFERENCES

OECD. 1984. Guidelines for Testing of Chemicals. Section 2: Effects on Biotic Systems. Method 201, Alga, Growth Inhibition Test. Adopted June 4, 1984.

Stephan, C.E. 1983. Computer program for calculation of LC50 values. Personal communication.

U.S. EPA. 1978. The *Selenastrum capricornutum* Printz Algal Assay Bottle Test. EPA-600/9-78-018. July, 1978.

Appendix A. WATER QUALITY DATA FROM TOXICITY TEST

Table A.1. Temperature measured during toxicity test

Day of Exposure	Temperature of Incubator, °C
0	23.5
1	23.3
2	23.3
3	23.1
4	23.2

Table A.2. pH measured during toxicity test

Nominal concentration (mg/L)	Replicate	pH	
		initial	final
0 (control)	1	8.0	9.0
	2	8.1	9.4
	3	8.2	9.3
62.5	1	7.8	8.4
	2	7.8	8.3
	3	7.7	8.3
125	1	7.5	8.2
	2	7.4	8.1
	3	7.4	8.0
250	1	7.2	7.9
	2	7.2	7.8
	3	7.2	7.8
500	1	6.9	7.5
	2	6.9	7.5
	3	6.9	7.6
1,000	1	6.9	7.4
	2	6.7	7.4
	3	6.7	7.3

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