

DATA EVALUATION REPORT

1. Chemical: Nuosept® 95 Preservative

2. Formulation:

<u>Sha#</u>	<u>Active Ingredients</u>	<u>%</u>
107001	- 5-Hydroxymethoxymethyl-1-aza-3,7-dioxabicyclo(3.3.0)octane . . . . .	24.5%
107002	- 5-Hydroxymethyl-1-aza-3,7-dioxabicyclo(3.3.0)octane . . . . .	17.7%
107003	- 5-Hydroxypoly[methyleneoxy (74% C2, 21% C3, 4% C4, 1% C5)] methyl-1-aza-3,7-dioxabicyclo (3.3.0)octane . . . . .	7.8%

3. Citation: Beavers, Joann B. 1982. Acute Oral Toxicity of Nuosept® 95 to Mallard Ducks. An unpublished reported prepared by Wildlife Int. for Nuodex Inc. Data Acc# 250533.

4. Reviewed by: Daniel Rieder  
Wildlife Biologist

5. Date reviewed: 6/29/83

6. Test Type: Avian acute oral  
Test Species: Mallard duck  
Test Material: Nuosept 95 (formulated product)

7. Reported Results:

The acute oral LD50 is estimated to be greater than 2510 mg/kg.

8. Reviewers Conclusions:

This study is scientifically sound and fulfills the guideline requirements for an avian acute oral LD50 for the formulated product. It shows that Nuosept 95 is practically non-toxic to birds.

### METHODS

Young adult mallard were tested, 10 each in a control and at 5 test levels (100, 215, 464, 1000 & 2510 mg/kg). Food was withheld 15 hours prior to testing. The test material was mixed with distilled water and intubated into crop via steel tube. Body weights were recorded on days 0, 3, 7 and 14. Feed consumption was measured. Test cages were indoor (72 X 90 X 33 cm). Temperature was maintained between approximately 65°F and 80°F and relative humidity ranged between 30% and 80%. Photoperiod was 14 hrs of light toxic symptoms were recorded daily.

### RESULTS

No mortality occurred at any test level. No overt symptoms of toxicity were observed at 100 mg/kg to 464 mg/kg dosage level. At 1000 mg/kg lethargy, loss of coordination and lower limb weakness were noted after dosing and through the first day. Vomiting occurred at the 2510 mg/kg level. All birds were asymptomatic by the end of day 1. At 100 mg/kg and 2510 mg/kg there was a dose responsive loss of weight for the first 3 days. Food consumption was lowered at these levels for the first 7 days. Weight gain and food consumption essentially returned to normal by the end of day 14.

#### AVERAGE BODY WEIGHT AND ESTIMATED FEED CONSUMPTION

<u>Material</u>	<u>Dosage</u> mg/kg	<u>Average</u> <u>Weight (g)</u>				<u>Estimated</u> <u>Feed Consumption</u> <u>Per Bird Per Day</u>	
		<u>Day 0</u>	<u>Day 3</u>	<u>Day 7</u>	<u>Day 14</u>	<u>0-7</u> g	<u>8-14</u>
NUOSEPT® 95	100	1120	1137	1146	1190	102	134
	215	1080	1129	1125	1147	90	114
	464	1127	1159	1177	1196	105	132
	1000	1117	1111	1134	1168	70	119
	2510	1095	1046	1059	1091	49	111
Controls	0	1151	1194	1181	1227	102	127

#### REVIEWERS EVALUATION

This study followed guideline protocol, it shows that Nuosept® 95 is practically non-toxic to birds. The test material was a formulated product, so this study is "core" only for this particular formulation of these three active ingredients.

#### CONCLUSION

Category: Core for this formulation

Rationale: This test was core because using the formulated product is considered more applicable when the pesticide may be released directly into the aquatic environment.