

TDMS0030

DATA EVALUATION RECORD

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CASE GS0014

ENDOSULFAN

PM 110 ~~08/20/80~~

CHEM 079401

Endosulfan ( Hexachlorohexahydromethano )

BRANCH EEB

DISC 40

TOPIC 05054543

FORMULATION 00 - ACTIVE INGREDIENT

FICHE/MASTER ID 05021060

CONTENT CAT 01

Knauf, W.; Schulze, E.F. (1973) New Findings on the Toxicity of Endosulfan and Its Metabolites to Aquatic Organisms. Mededelingen Van de Faculteit Landbouwwetenschappen, Rijksuniversiteit Gent. [Communications of the Faculty of Agricultural Sciences, State University of Ghent.] 38(3):717-732.

SUBST. CLASS = S.

OTHER SUBJECT DESCRIPTORS

SEC: EEB -40-05054547

DIRECT RVW TIME = 2 Hrs. (MH) START-DATE 9/26/80

END DATE 9/26/80

REVIEWED BY: Robert K. Hitch

TITLE: Fish and Wildlife Biologist

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*Robert K. Hitch*

DATE:

*9/26/80*

APPROVED BY:

TITLE:

ORG:

LOC/TEL:

SIGNATURE:

DATE:

CONCLUSIONS: The fish tests were aerated and should be considered invalid.

The Daphnia test is the only other test that might have been considered core, but it was conducted at 21°C, which is 4°C warmer than the recommended.

METHODS AND MATERIALS:

Test Type - 48 hrs. static tests with aquatic invertebrates and fish.

REPORTED RESULTS:

Fish - 10-litre aquaria, continuously aerated at a rate of 1.5 - 2 litres/hour; pH = 7.2 - 7.6; water hardness: 16 - 18° DH (determined in accordance with German standard methods). The salt water trials were carried out with golden orfe (*Idus melanotus*) which had been adapted for two weeks to this environment.

Snails - 500 ml glass bakerys according to the method recommended by the WHO (1970).

Larvae of Aedes aegypti, Daphnia magna -  
100 ml conical flasks; at least 30 animals per concentration.  
The test medium was a 1: 1 mixture of culture water and deionized water.

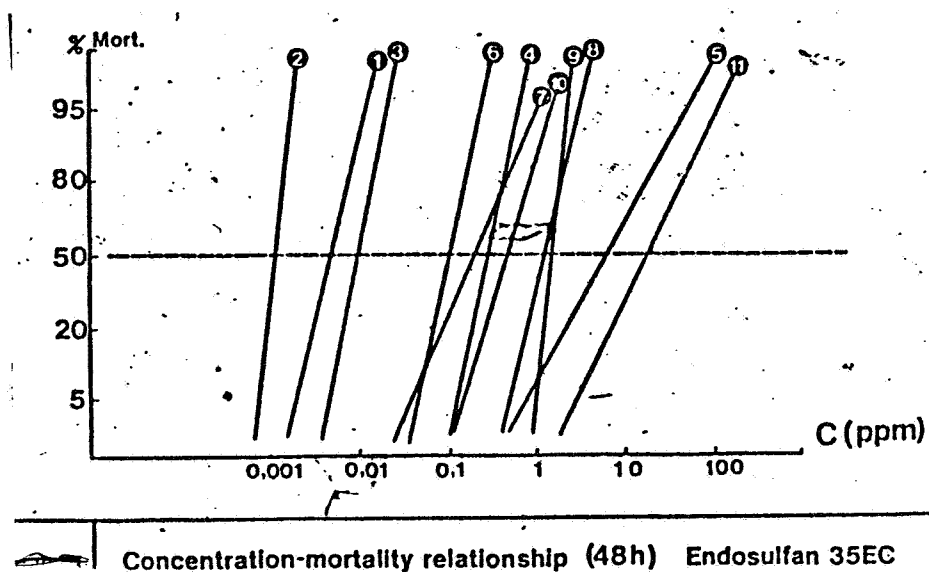
Artemia salina, Tubifex tubifex, Chironomus thummi larvae -  
petri dishes with 30 ml solution; for the trials with *Tubifex tubifex* 200 mg animals (wet weight); for the trials with *Artemia* 10 adult specimens per concentration in 3% salt water; of *Chironomus* 10 larvae per petri dish.  
The trials with these organisms were conducted in the dark.

Legend for Figure 1

| Pisces                         | Crustacea                | Insecta                     | Mollusca                    | Oligochaeta                |
|--------------------------------|--------------------------|-----------------------------|-----------------------------|----------------------------|
| 1. <i>Idus melanotus</i>       | 4. <i>Daphnia magna</i>  | 6. <i>Aedes aegypti</i>     | 8. <i>Planorbis corneus</i> | 11. <i>Tubifex tubifex</i> |
| 2. <i>Lebistes reticulatus</i> | 5. <i>Artemia salina</i> | 7. <i>Chironomus thummi</i> | 9. <i>Limnea stagnalis</i>  |                            |
| 3. <i>Carassius auratus</i>    |                          |                             | 10. <i>Physa fontinalis</i> |                            |

Algae : *Chlorella vulgaris*

TEST-ORGANISMS ENDOSULFAN AND METABOLITES



DISCUSSION: N/A.