FORMULATION:
% a.i. SC # CHEMICAL NAME
95% ALDICARB


Results: Mallard duck acute oral LD$_{50}$ = 4.44 mg/kg (95% l.l. 3.49-5.65 mg/kg for 6 month old birds. LD$_{50}$s for other age mallards were 1.92 (1.55-2.37) mg/kg for 36 hour birds, 3.60 (2.90-4.49) mg/kg for 7 day birds, and 6.73 (5.29-8.55) mg/kg for 30 day birds. Dose levels were not reported, nor were 0% and 100% mortality levels. Toxic symptoms were not reported.

Validation Category: supplemental

Category rationale: Basically no more information was presented than the raw LD$_{50}$ and 95% c.i.

Category repairability: No. Only five birds were used per concentration.

Abstract: This paper reports primarily on the sensitivity of different aged mallards (36 hr, 7 days, 30 day, 6 months) to several pesticides. LD$_{50}$ values varied not only with age, but also with type of pesticide. In general, young ducks were more susceptible to pesticides, but this was not always true.

With respect to mallard LD$_{50}$ for aldicarb, only final figures are given for LD$_{50}$. No raw mortality data or dose concentrations were reported. Five birds were used at each dose level. Food consumption and body weights were not reported. Neither were housing conditions, length and schedule of observation period, times of mortality, nor toxic symptoms. The method of LD$_{50}$ calculation was not reported.
STUDY VALIDATION

DATA REVIEW NUMBER: ES-C-1

TEST: Avian acute oral

SPECIES: Mallard duck (Anas platyrhynchos)

RESULTS: LD$_{50}$ values for four age groups were determined:

<table>
<thead>
<tr>
<th>AGE</th>
<th>TOXICITY LC$_{50}$ (95% conf. limits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>36 hr. 3 hrs.</td>
<td>1.92 mg/kg (1.55 - 2.37 mg/kg)</td>
</tr>
<tr>
<td>7 days 1 day</td>
<td>3.60 mg/kg (2.90 - 4.49 mg/kg)</td>
</tr>
<tr>
<td>30 days 3 days</td>
<td>6.73 mg/kg (5.29 - 8.55 mg/kg)</td>
</tr>
<tr>
<td>6 mo. 3 days</td>
<td>4.44 mg/kg (3.49 - 3.65 mg/kg)</td>
</tr>
</tbody>
</table>

The experiment was designed to determine the effect of age on mallard sensitivity to toxicants. To determine the effect, LD$_{50}$'s were run on different aged kinds using 5 doses with 5 birds per dose level (personal communication with R. Tucker).

CHEMICAL: Temik 95% purity

TITLE: Effect of Age on Sensitivity: Acute Oral Toxicity of 14 Pesticides to Mallard Ducks of Several Ages


ACCESSION NO: 096397 ("Document #4")

STUDY DATE: Circa 1971

REGISTRANT: Union Carbide Corp.

VALIDATION CATEGORY: Supplemental

CATEGORY REPAIRABILITY: Yes, to CORE if the following data is submitted:

1. Bird weights and food consumption during the testing period.

2. Raw mortality data so that a statistical analysis may be performed.
3. Signs of intoxicification

4. Date of study

NOTE: It is recognized that the referenced study was conducted at a U.S. Government lab by highly qualified investigators, however, due to a lack of the requested data the study was validated as supplemental.