YOUNGER LABORATORIES
Biochemists Pharmacologists Analysts

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St. Louis [illegible], Missouri
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Certificate of Analysis

June 25th, 1962

SUBJECT -

Toxicological Investigation Of: Arcolor 1262
Monsanto Sample Number 40
Monsanto Project Number T-62-38

4-6-58
6/20/62

STUDY CONDUCTED FOR -

Monsanto Chemical Company, St. Louis, Missouri

EXPERIMENTAL PROCEDURES -

A) Oral LD_{50} (Rats)

The diluted compound was fed by stomach tube to Sprague-Dawley strain albino rats.

After the approximate Minimum Lethal Dose was determined, groups of male and female rats were fed in increasing doses at increments of 0.1 fractional log intervals at four levels designed to blanket the toxicity range thereby supplying data for calculation of the LD_{50} which was done according to a modification of the method of H. J. de Beer.

Observations were made for toxic symptoms and the viscera of the animals that succumbed were examined macroscopically.

The data, together with the dilution at which the compound was fed, are shown in Table I.

B) Skin Absorption ELD (Rabbits)

The diluted compound was applied in increasing doses at increments of 0.2 fractional log intervals to the closely clipped, intact skin of New Zealand white female rabbits.

The treated areas were covered with plastic strips and the animals placed in wooden stocks for periods up to twenty-four hours, after which time they were assigned to individual cages.

Observations were made for toxic symptoms and the viscera of the animals that succumbed were examined macroscopically.

The data, together with the dilution at which the compound was applied, are shown

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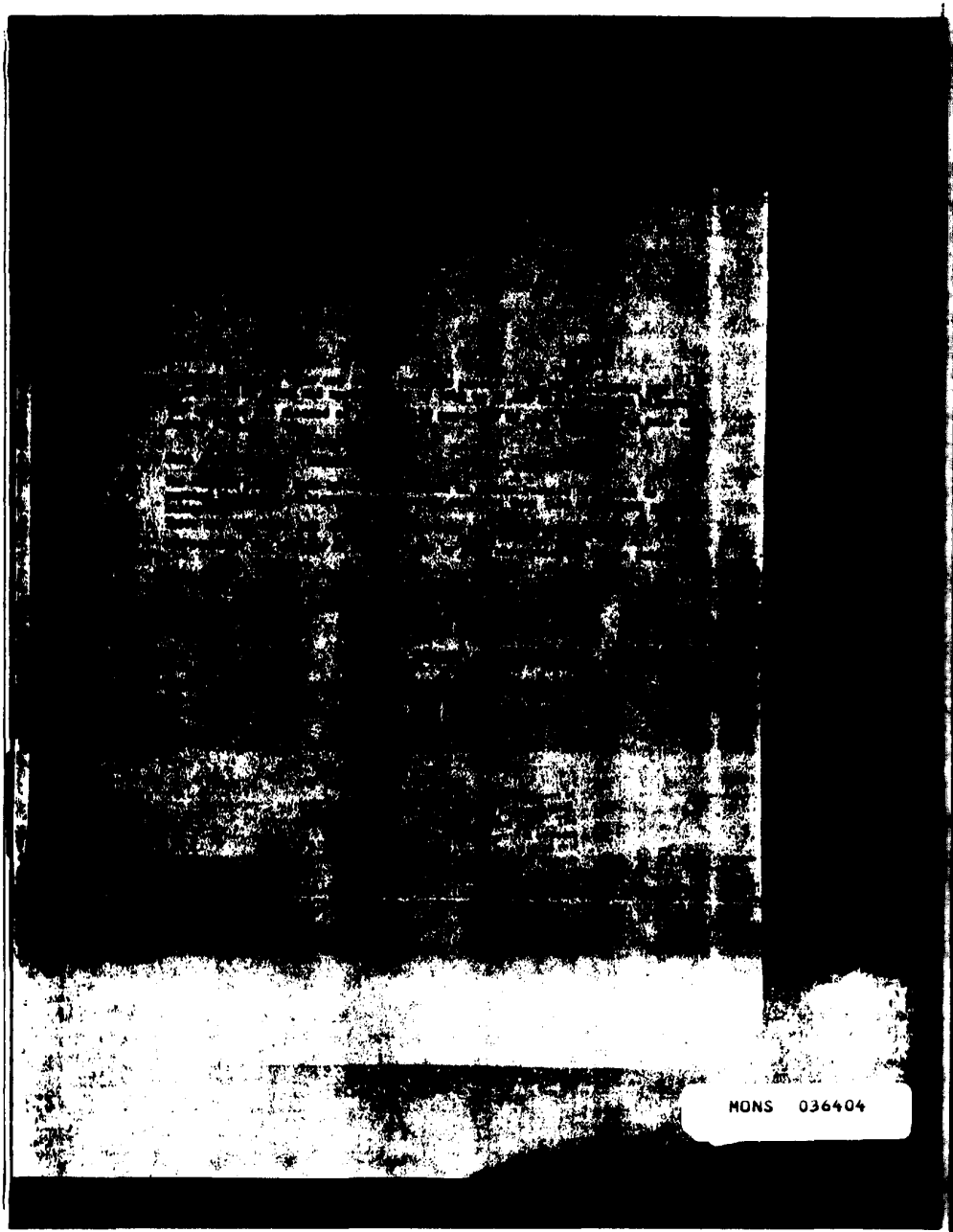

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St. Louis, [illegible]
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TABLE I

THE ORAL LD_{50} OF 'Aroclor 1262' FOR RATS

Sample Fed As A 50.0% Solution In Corn Oil

Animal No. - Sex	Weight Gms.	Dose Mg./Kg.	Fate
1- Female	[illegible]	7,[illegible]	Survived
2- Female	[illegible]	7,[illegible]	Survived
3- Female	[illegible]	7,[illegible]	Survived
4- Male	[illegible]	7,[illegible]	Survived
5- Male	[illegible]	7,[illegible]	Survived
6- Male	[illegible]	10,000	Died
7- Female	[illegible]	10,000	Survived
8- Female	[illegible]	10,000	Died
9- Female	[illegible]	10,000	Survived
10- Male	[illegible]	10,000	Survived
11- Male	[illegible]	12,[illegible]	[illegible]
12- Male	[illegible]	12,[illegible]	Died
13- Female	[illegible]	12,[illegible]	Survived
14- Female	[illegible]	12,[illegible]	[illegible]
15- Female	[illegible]	12,[illegible]	Survived
16- Male	[illegible]	15,[illegible]	[illegible]
17- Male	[illegible]	15,[illegible]	[illegible]
18- Male	[illegible]	15,[illegible]	[illegible]
19- Female	[illegible]	15,[illegible]	Died
20- Male	[illegible]	15,[illegible]	Died

DISCUSSION -

The oral LD_{50} for male and female rats was placed at 11,300 milligrams per kilogram with lower and upper limits of [illegible] to 12,[illegible] milligrams per kilogram.

[illegible] compound was classed as practically non-toxic by oral ingestion in male and female rats.

Survival time was one to six days with most deaths occurring in three days.

Toxic symptoms [illegible] severe diarrhea, loss of appetite, lethargy, and [illegible] weakness.

At autopsy there was inflammation of the gastric mucosa, tissue edema, and [illegible] congestion macroscopically.

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TABLE II

THE MINIMUM LETHAL DOSE OF 'Aroclor 1260'

BY SKIN ABSORPTION IN RABBITS

Sample Applied As A 50.0% Solution In Corn Oil

Animal No. - Sex	Weight Kg.	Dose Mg./Kg.	Weight Change 5 Days Later Kg.	Fate
1 - Female	2.2	794	- 0.1	Survived
2 - Female	2.7	1260	- 0.8	Survived
3 - Female	2.5	2000	- 0.3	Died -- 7 Days
4 - Female	2.6	2000	- 0.2	Survived
5 - Female	2.4	3160	- 0.5	Died -- 8 Days
6 - Female	2.7	5010	- 0.3	Died -- 5 Days

DISCUSSION -

The Minimum Lethal Dose by Skin Absorption in female rabbits was found to be greater than 1260 milligrams per kilogram and less than 3160 milligrams per kilogram. There was one death and one survival at 2000 milligrams per kilogram.

The compound was classed as mildly toxic by skin absorption in female rabbits.

Survival time was five to eight days.

Toxic symptoms included poor appetite with resultant loss of weight, nervousness, increasing weakness, and sudden collapse.

At autopsy there was pulmonary hyperemia, liver discoloration, and renal congestion.

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