YOUNGER LABORATORIES

Biochemists . Pharmacologists . Analysts

Certificate of Analysis

June 25th, 1962

SUBJECT -

Toxicological Investigation Of: Arvalor 1268

Monsanto Sample Number 39

Monsanto Project Number T-62-37

STUDY CONDUCTED FOR -

Monsanto Chemical Company, St. Louis, Missouri

EXPERIMENTAL PROCEDURE -

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 eliminate the toxicity range through supplying data for calculation of the LD_{50} which was done according to a modification of the method of E. 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 LD (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 ani in that succumbed were examined macroscopically.

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

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REMARK -

Arochlor 1260

A) Oral LD_{50} (Rats)

The Oral LD_{50} for male and female rats was placed at 10,000 milligrams per kilogram with lower and upper limits of 8,408 to 11,648 milligrams per kilogram.

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

B) Skin Absorption MLD (Rabbits)

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

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

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BY: FRED M. TOXIMER

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MONS 036400

TABLE I

THE ORAL LD_{50} OF 'Aroclor 1260' FOR RATS

Sample Fed As A 50.0% Solution In Corn Oil

Animal No. - Sex	Weight Gm.	Dose Mg./Kg.	Fate
1- Female	[redacted]	6,320	Survived
2- Female	[redacted]	6,320	Survived
3- Female	[redacted]	6,320	Survived
4- Male	[redacted]	6,320	Survived
5- Male	[redacted]	6,320	Survived
6- Male	[redacted]	7,900	Survived
7- Female	[redacted]	7,900	Survived
8- Female	[redacted]	7,900	Survived
9- Female	[redacted]	7,900	Died
10- Male	[redacted]	7,900	Survived
11- Male	[redacted]	10,000	Died
12- Male	[redacted]	10,000	Survived
13- Female	[redacted]	10,000	Survived
14- Female	[redacted]	10,000	Died
15- Male	[redacted]	10,000	Survived
16- Male	[redacted]	12,650	Died
17- Male	[redacted]	12,650	Died
18- Female	[redacted]	12,650	Survived
19- Female	[redacted]	12,650	Died
20- Male	[redacted]	12,650	Died

REMARKS -

The Oral LD_{50} for male and female rats was placed at 10,000 milligrams per kilogram with lower and upper limits of 8,670 to 11,530 milligrams per kilogram.

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

Survival time was two to five days with most deaths occurring in three days.

Toxic symptoms included severe diarrhea, loss of appetite, and increasing lethargy and weakness.

At autopsy there was inflammation of the gastric mucosa and liver hyperemia macroscopically.

MONS 036401

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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 7 Days Later Kg.	Note
1 - Female	1.9	500	+ 0.1	Survived
2 - Female	2.2	794	0.0	Survived
3 - Female	2.4	1260	0.0	Survived
4 - Female	2.6	2000	- 0.1	Died -- 8 Days
5 - Female	2.4	2000	- 0.1	Died -- 7 Days
6 - Female	2.4	3160	- 0.5	Died -- 7 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 2000 milligrams per kilogram.

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

Survival time was seven to eight days.

Toxic symptoms included weight loss after two to three days with increasing weakness followed by collapse in six to seven days.

At autopsy there was evidence of liver dysfunction and renal hyperemia macroscopically.

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