Scientific Associates

1474 S. Vandeventer Ave. · St. Louis 10, Mo.

December 11, 1953

CERTIFICATE OF ANALYSIS

C+25AM

SUBJECT -

The Acute Oral Toxicity (LD_{50}) of Arocolor 1242 For Rats.

TEST CONDUCTED FOR -

Monsanto Chemical Company, St. Louis, Missouri.

Monsanto Project No.: SA-19

Monsanto Sample No.: Lot No. 166

EXPERIMENTAL PROCEDURE -

The Acute Oral Toxicity (LD_{50}) was found by the introduction of measured single doses of undiluted Arocolor into the stomachs of Sprague Dawley strain albino rats by means of a rubber catheter attached to a hypodermic syringe.

After the toxicity range was found, groups of animals were dosed at 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 Bliss (Quart. J. Pharm. and Pharmacol., 11, 1938).

Selected animals from those receiving a lethal dose were autopsied and macroscopic examination made of the viscera. The data are given in Table I.

DSW 552683

This is a confidential report which may be used when requested by physicians and health officials, but is not to be used in any form of advertising without written permission.

STLCOPCB4091100

TABLE I

THE ACUTE ORAL TOXICITY (LD_{50}) OF AROCLOR 1242 FOR RATS

Animal No.- Sex	Weight Grams	Dose ml./Kg.	Fate
1- Female	185	3.25	Survived
2- Female	170		Survived
3- Female	190		Survived
4- Male	230		Died
5- Male	215		Died
6- Female	200		Survived
7- Male	210		Died
8- Male	235		Survived
9- Male	240		Died
10- Female	195		Survived
11- Female	185		Survived
12- Male	245		Survived
13- Female	220	3.75	Died
14- Male	215		Died
15- Male	235		Survived
16- Female	180		Survived
17- Male	190		Survived
18- Male	225		Died
19- Female	210		Survived
20- Female	230		Survived
21- Female	175		Died
22- Male	220		Survived
23- Male	240	4.25	Died
24- Male	245		Died
25- Female	200		Survived
26- Female	185		Survived
27- Female	190		Survived
28- Male	230		Died
29- Male	220		Survived
30- Male	250		Survived
31- Male	195		Died
32- Female	210		Died
33- Female	180		Died
34- Female	175	4.75	Died
35- Male	220		Died
36- Male	230		Survived
37- Male	200		Survived
38- Male	240		Died
39- Female	185		Died
40- Female	200		Died
41- Female	175		Survived
42- Female	180		Died
43- Female	190		Died
44- Female	175		Died

DSW 552684

DISCUSSION -

The LD_{50} was calculated to be 4.15 milliliters per kilogram with fiducial limits of 4.02-4.36 milliliters per kilogram. Survival time for those animals receiving a lethal dose varied from 12-54 hours.

Lethargy developed in the majority of animals a few hours after dosing. There was also moderate diarrhea.

At autopsy, the liver was dull red with a greenish hue while the spleen was abnormally dark. The kidneys appeared normal by macroscopic examination.

SUMMARY -

The LD_{50} of Aroclor 1242 was found to be 4.15 milliliters per kilogram with lower and upper limits of 4.02-4.36 milliliters per kilogram.

SCIENTIFIC ASSOCIATES

Fred M. Younger

BY: FRED M. YOUNGER

[illegible] is to be used in development of [illegible] may be given to responsible sales contacts, but is not to be used by them in advertising copy. The source of this material is not to be divulged until it appears in formal publications. No exceptions to the established rule may be made without the approval of the Medical Department in St. Louis. Customers' inquiries regarding matters of toxicity are to be referred as before to the Medical Department in St. Louis for reply.
— Monsanto Chemical Company