PROJECT NO Y-67-105
REPORT FILE

YOUNGER LABORATORIES

Biochemists . . . Pharmacologists . . . Analysts

123 CLIFF CAVE ROAD
SAINT LOUIS, MO., 63129
PHONE: TILDEN 6-2840

Certificate of Analysis

October 19th, 1967

SUBJECT -

Toxicological Investigation Of: (XA-140) Santicizer 1706

Monsanto Sample Number 118

Monsanto Project Number Y-67-105

STUDY CONDUCTED FOR -

Monsanto Company, St. Louis, Missouri

EXPERIMENTAL PROCEDURE -

Oral LD_{50} (Rats, Mixed Sex)

The undiluted compound was fed by stomach tube to Sprague-Dawley strain albino male and female 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 E. J. de Beer.

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

The data are shown in Table I.

SUMMARY -

(XA-140) Santicizer 1706

Oral LD_{50} (Rats, Mixed Sex)

The Oral LD_{50} for male and female rats was placed at 6920 milligrams per kilogram with lower and upper limits of 6020 to 7960 milligrams per kilogram.

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

YOUNGER LABORATORIES

BY: FRED M. YOUNGER

MONS 038073

This confidential report is not to be used in any form of advertising without written permission

To: Monsanto Company
St. Louis, Missouri
Younger Laboratories Certificate of Analysis - Page 2 (10/19/67) - Y-67-105

TABLE I

THE ORAL LD_{50} OF (XA-140) Santicizer 1706' FOR RATS

Sample Fed Undiluted

Animal No. - Sex	Weight Gm.	Dose Mg./Kg.	Fate
1- Female	220	5,010	Survived
2- Male	235	5,010	Survived
3- Female	210	5,010	Survived
4- Male	240	5,010	Survived
5- Female	215	5,010	Survived
6- Male	250	6,310	Survived
7- Female	210	6,310	Survived
8- Male	235	6,310	Died
9- Female	215	6,310	Died
10- Male	240	6,310	Survived
11- Female	220	7,940	Died
12- Male	250	7,940	Died
13- Female	210	7,940	Survived
14- Male	235	7,940	Died
15- Female	205	7,940	Died
16- Male	240	10,000	Died
17- Female	215	10,000	Died
18- Male	245	10,000	Died
19- Female	210	10,000	Died
20- Male	250	10,000	Died

The material in this report is to be used in development of the product and may be given to responsible sales contacts, but it 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 Company

DISCUSSION -

The Oral LD_{50} for male and female rats was placed at 6,920 milligrams per kilogram with lower and upper limits of 6,020 to 7,960 milligrams per kilogram.

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

Survival time was several hours to two days.

Toxic symptoms included weakness, salivation and lacrimation in two to three hours. Diarrhea, tremors, dyspnea, and coma also developed.

At autopsy there was inflammation of the gastric mucosa in addition to renal and liver hyperemia.