

Acute Oral Toxicity Screen
with T-306700C
in Albino Rats



Experiment No.:

0981AR0147

Conducted At:

Safety Evaluation Laboratory
Riker Laboratories, Inc.
St. Paul, Minnesota

Dates Conducted:

April 8, 1981 to April 22, 1981

Conducted By:

K. D. O'Malley 5/8/81
K. D. O'Malley, BS Date
Advanced Toxicologist
Study Director

Reviewed By:

K. L. Ebbens 5/15/81
K. L. Ebbens, BS Date
Supervisor, Acute Toxicology

cc: M. T. Case
K. L. Ebbens
P. D. Griffith
W. C. McCormick

Summary

An acute oral toxicity screen with T-3067CoC was conducted from April 8, 1981 to April 22, 1981 using male and female albino rats ranging in body weight from 225-299 grams. The test material was administered by gastric intubation at a dosage level of 5,000 mg/kg body weight. No mortalities, untoward behavioral reactions or body weight losses occurred during the 14 day observation period. Necropsy of the animals performed upon termination of the study revealed no visible lesions. The approximate oral LD50 of T-3067CoC is greater than 5,000 mg/kg in fasted male and female albino rats.

Introduction

The objective of this study was to approximate the acute oral LD50 of T-3067CoC in fasted albino rats. This study is not regulated by the Food and Drug Administration's Good Laboratory Practice Regulation of 1978, although the standard operating procedures of this laboratory adhere to the general principals of this regulation. The raw data generated by the Study Director and the final report are stored in the conducting laboratory's archives.

Method and Results

Young albino rats^a were used in this test. All animals were held under quarantine for several days prior to testing with only animals which appeared to be in good health and suitable as test animals at the initiation of the study used. The rats were housed in suspended, wire-mesh cages in temperature and humidity controlled rooms and permitted a standard laboratory diet^b plus water ad libitum except during the 16 - 20 hour period immediately prior to gastric intubation when food was withheld.

Five male and five female rats were administered the test material at a preselected dosage level. All doses were administered at a constant volume of 10 ml/kg directly into the stomachs of the rats using a hypodermic syringe equipped with a ball-tipped intubating needle^c.

After gastric administration of the test article, the rats were returned to their cages and observed for the following 14 days. Initial and final body weights, mortalities (Table 1) and adverse reactions (Table 1) were recorded. A necropsy was conducted on all animals that died during the study as well as those euthanatized at the end of the 14 day observation period (Table 1). The protocol, principal personnel involved in the study, composition characteristics, and Quality Assurance statement are contained in Appendices I - IV.

^a Charles River Breeding Laboratories, Inc., Wilmington, MA
^b Ralston Purina Laboratory Chow, Ralston Purina, St. Louis, Missouri
^c Popper and Sons, Inc., New Hyde Park, New York

TABLE 1

ACUTE ORAL TOXICITY SCREEN - ALBINO RATS

with T-3067CoC

Mortality, Necropsy, Body Weight Data and Behavioral Reactions

		Individual Body Weights (g)				
Dose ^a (mg/kg)	Sex	Animal Number	Test Day Number:		Number Dead Number Tested	Percent Dead
			0	14		
5,000	M	1R2700	297	419	0/5	0
		1R2701	299	421		
		1R2702	270	382		
		1R2703	283	401		
		1R2704	274	380		
5,000	F	1R2717	240	294	0/5	0
		1R2718	225	285		
		1R2719	245	301		
		1R2720	241	288		
		1R2721	238	258		

^a The test article was administered as an aqueous suspension.

The approximate oral LD50 is greater than 5,000 mg/kg in fasted male and female albino rats.

Necropsy

Necropsies performed upon termination of the study revealed no visible lesions.

Behavioral Reactions

No untoward behavioral reactions were noted during the 14 day evaluation period.

PROTOCOL

TEST: Acute Oral Toxicity
SPONSOR: 3M Commercial Chemicals Division
CONDUCTED BY: Safety Evaluation Laboratory, Riker Laboratories, Inc., St. Paul, Minnesota
TEST ARTICLE: T-3067CoC
CONTROL ARTICLE: None
PROPOSED STARTING/COMPLETION DATE OF TEST: 4/81 - 7/81
TEST SYSTEM AND SOURCE: Rat, Charles River Breeding Laboratories, Inc., Wilmington, MA

Sex: M,FNumber: 5,5Weight Range: 200-300 gm.

OBJECTIVE: The objective of this test will be to characterize the acute oral toxicity of the test article in albino rats. Rats were selected as a test system for reproducibility of response, historical use, ease in handling and general availability.

METHOD: The animals will be housed in stainless steel suspended wire mesh cages in temperature and humidity controlled rooms during both the quarantine and test periods, with food^a and water offered ad libitum^b. Each animal will be identified by color coding, according to the laboratory's standard operating procedure, which will correspond to a card affixed to the outside of the cage. A single dosage of 5,000 mg/kg will be administered each animal, however, if this dosage level does not adequately characterize the toxicity of the test article, additional animals will be administered the test article at supplemental dosage levels. Any additional dosage levels will be documented and filed with this protocol. The test article will be administered to the animals in the form received from the sponsor. After administration of the test article, the animals will be returned to their cages and observed for any untoward behavioral reactions for the following 14 days. Initial and final body weights will be recorded. A gross necropsy which will include, but not be limited to, heart, lungs, liver, kidneys and general gastrointestinal tract will be conducted on all animals which die during the conduct of the test as well as the animals surviving the test period. Any gross abnormalities which are observed during the conduct of the necropsy will be recorded with specific mention to the organ and/or site observed. The acute median lethal dose (LD50) of the test article will be calculated, if possible, using a probit analysis method at the end of the observation period. All raw data and the final report will be stored in the Riker Laboratories Archives, St. Paul, Minnesota.

^a Purina Laboratory Chow, Ralston Purina, St. Louis, Missouri

^b Except during a 16-20 hour period immediately prior to dosing when food will be withheld.

William C. McConica 3/24/81
Sponsor Date Study Director Date

RECEIVED
MAR 30 1981
Safety Evaluation

APPENDIX II

5.

Principal Participating Personnel Involved in the Study

<u>Name</u>	<u>Function</u>
G. E. Hart	Laboratory Technician Acute Toxicology
K. D. O'Malley, BS	Advanced Toxicologist Study Director
K. L. Ebbens, BS	Supervisor Acute Toxicology
G. C. Pecore	Supervisor Animal Laboratory

APPENDIX IIIComposition Characteristics

-
This study is not regulated by the Good Laboratory Practice Regulation of 1978 and therefore information pertaining to composition characteristics is not applicable for inclusion in this study.

APPENDIX IVQuality Assurance Statement

This study is not regulated by the Good Laboratory Practice Regulation of 1978 and therefore a statement signed and prepared by the Quality Assurance group is not applicable. This study was, however, audited by the Quality Assurance group.

In addition to the data audit, different significant phases for studies underway in the Toxicology Laboratory are inspected weekly on a recurring cycle, and the facilities are examined by Laboratory Quality Assurance on a three month schedule.