

**TOXICOLOGICAL PROFILE FOR
TOXAPHENE**

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
Public Health Service
Agency for Toxic Substances and Disease Registry

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DISCLAIMER

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UPDATE STATEMENT

A Toxicological Profile for toxaphene was released in August 1994. This edition supersedes any previously released draft or final profile.

Toxicological profiles are revised and republished as necessary, but no less than once every three years. For information regarding the update status of previously released profiles, contact ATSDR at:

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FOREWORD

This toxicological profile is prepared in accordance with guidelines* developed by the Agency for Toxic Substances and Disease Registry (ATSDR) and the Environmental Protection Agency (EPA). The original guidelines were published in the *Federal Register* on April 17, 1987. Each profile will be revised and republished as necessary.

The ATSDR toxicological profile succinctly characterizes the toxicologic and adverse health effects information for the hazardous substance described therein. Each peer-reviewed profile identifies and reviews the key literature that describes a hazardous substance's toxicologic properties. Other pertinent literature is also presented, but is described in less detail than the key studies. The profile is not intended to be an exhaustive document; however, more comprehensive sources of specialty information are referenced.


The focus of the profiles is on health and toxicologic information; therefore, each toxicological profile begins with a public health statement that describes, in nontechnical language, a substance's relevant toxicological properties. Following the public health statement is information concerning levels of significant human exposure and, where known, significant health effects. The adequacy of information to determine a substance's health effects is described in a health effects summary. Data needs that are of significance to protection of public health are identified by ATSDR and EPA.

Each profile includes the following:

- (A) The examination, summary, and interpretation of available toxicologic information and epidemiologic evaluations on a hazardous substance to ascertain the levels of significant human exposure for the substance and the associated acute, subacute, and chronic health effects;
- (B) A determination of whether adequate information on the health effects of each substance is available or in the process of development to determine levels of exposure that present a significant risk to human health of acute, subacute, and chronic health effects; and
- (C) Where appropriate, identification of toxicologic testing needed to identify the types or levels of exposure that may present significant risk of adverse health effects in humans.

The principal audience for the toxicological profiles is health professionals at the Federal, State, and local levels; interested private sector organizations and groups; and members of the public.

This profile reflects ATSDR's assessment of all relevant toxicologic testing and information that has been peer-reviewed. Staff of the Centers for Disease Control and Prevention and other Federal scientists have also reviewed the profile. In addition, this profile has been peer-reviewed by a nongovernmental panel and was made available for public review. Final responsibility for the contents and views expressed in this toxicological profile resides with ATSDR.



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*Legislative Background

The toxicological profiles are developed in response to the Superfund Amendments and Reauthorization Act (SARA) of 1986 (Public Law 99499) which amended the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA or Super-fund). This public law directed ATSDR to prepare toxicological profiles for hazardous substances most commonly found at facilities on the CERCLA National Priorities List and that pose the most significant potential threat to human health, as determined by ATSDR and the EPA. The availability of the revised priority list of 275 hazardous substances was announced in the *Federal Register* on April 29, 1996 (61 FR 18744). For prior versions of the list of substances, see *Federal Register* notices dated April 17, 1987 (52 FR 12866); October 20, 1988 (53 FR 41280); October 26, 1989 (54 FR 43619); October 17, 1990 (55 FR 42067); October 17, 1991 (56 FR 52166); October 28, 1992 (57 FR 48801); and February 28, 1994 (59 FR 9486). Section 104(l)(3) of CERCLA, as amended, directs the Administrator of ATSDR to prepare a toxicological profile for each substance on the list.

CONTRIBUTORS

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THE PROFILE HAS UNDERGONE THE FOLLOWING ATSDR INTERNAL REVIEWS:

1. Green Border Review. Green Border review assures the consistency with ATSDR policy.
2. Health Effects Review. The Health Effects Review Committee examines the health effects chapter of each profile for consistency and accuracy in interpreting health effects and classifying endpoints.
3. Minimal Risk Level Review. The Minimal Risk Level Workgroup considers issues relevant to substance-specific minimal risk levels (MRLs), reviews the health effects database of each profile, and makes recommendations for derivation of MRL.

PEER REVIEW

A peer review panel was assembled for toxaphene. The panel consisted of the following members:

1. Dr. William Buck, Private Consultant, Consul-Tox, Inc., 1206B County Road, 800N., Tolono, Illinois;
2. Mr. Anthony Donigian Jr., Private Consultant, AQUATERRA Consultants, 2672 Bayshore Parkway, Suite 1001, Mountain View, California; and
3. Dr. Donald Morgan, Private Consultant, 326 Highland Drive, Iowa City, Iowa.

These experts collectively have knowledge of toxaphene's physical and chemical properties, toxicokinetics, key health end points, mechanisms of action, human and animal exposure, and quantification of risk to humans. All reviewers were selected in conformity with the conditions for peer review specified in Section 104(i)(13) of the Comprehensive Environmental Response, Compensation, and Liability Act, as amended.

Scientists from the Agency for Toxic Substances and Disease Registry (ATSDR) have reviewed the peer reviewers' comments and determined which comments will be included in the profile. A listing of the peer reviewers' comments not incorporated in the profile, with a brief explanation of the rationale for their exclusion, exists as part of the administrative record for this compound. A list of databases reviewed and a list of unpublished documents cited are also included in the administrative record.

The citation of the peer review panel should not be understood to imply its approval of the profile's final content. The responsibility for the content of this profile lies with the ATSDR.

CONTENTS

FOREWORD	v
CONTRIBUTORS	vii
PEER REVIEW	ix
LIST OF FIGURES	xv
LIST OF TABLES	xvii
1. PUBLIC HEALTH STATEMENT	1
1.1 WHAT IS TOXAPHENE?	1
1.2 WHAT HAPPENS TO TOXAPHENE WHEN IT ENTERS THE ENVIRONMENT?	2
1.3 HOW MIGHT I BE EXPOSED TO TOXAPHENE?	3
1.4 HOW CAN TOXAPHENE ENTER AND LEAVE MY BODY?	3
1.5 HOW CAN TOXAPHENE AFFECT MY HEALTH?	3
1.6 IS THERE A MEDICAL TEST TO DETERMINE WHETHER I HAVE BEEN EXPOSED TO TOXAPHENE?	4
1.7 WHAT RECOMMENDATIONS HAS THE FEDERAL GOVERNMENT MADE TO PROTECT HUMAN HEALTH?	5
1.8 WHERE CAN I GET MORE INFORMATION?	6
2. HEALTH EFFECTS	7
2.1 INTRODUCTION	7
2.2 DISCUSSION OF HEALTH EFFECTS BY ROUTE OF EXPOSURE	7
2.2.1 Inhalation Exposure	9
2.2.1.1 Death	9
2.2.1.2 Systemic Effects	10
2.2.1.3 Immunological and Lymphoreticular Effects	14
2.2.1.4 Neurological Effects	14
2.2.1.5 Reproductive Effects	14
2.2.1.6 Developmental Effects	15
2.2.1.7 Genotoxic Effects	15
2.2.1.8 Cancer	15
2.2.2 Oral Exposure	15
2.2.2.1 Death	16
2.2.2.2 Systemic Effects	17
2.2.2.3 Immunological and Lymphoreticular Effects	37
2.2.2.4 Neurological Effects	38
2.2.2.5 Reproductive Effects	39
2.2.2.6 Developmental Effects	40
2.2.2.7 Genotoxic Effects	42
2.2.2.8 Cancer	42
2.2.3 Dermal Exposure	43
2.2.3.1 Death	43
2.2.3.2 Systemic Effects	45
2.2.3.3 Immunological and Lymphoreticular Effects	47

2.2.3.4	Neurological Effects	47
2.2.3.5	Reproductive Effects	47
2.2.3.6	Developmental Effects	47
2.2.3.7	Genotoxic Effects	48
2.2.3.8	Cancer	48
2.3	TOXICOKINETICS	48
2.3.1	Absorption	48
2.3.1.1	Inhalation Exposure	48
2.3.1.2	Oral Exposure	49
2.3.1.3	Dermal Exposure	49
2.3.2	Distribution	50
2.3.2.1	Inhalation Exposure	50
2.3.2.2	Oral Exposure	50
2.3.2.3	Dermal Exposure	53
2.3.2.4	Other Routes of Exposure	53
2.3.3	Metabolism	54
2.3.3.1	Inhalation Exposure	54
2.3.3.2	Oral Exposure	54
2.3.3.3	Dermal Exposure	58
2.3.3.4	Other Exposure	58
2.3.4	Excretion	58
2.3.4.1	Inhalation Exposure	58
2.3.4.2	Oral Exposure	59
2.3.4.3	Dermal Exposure	62
2.3.4.4	Other Routes of Exposure	63
2.4	MECHANISMS OF ACTION	63
2.5	RELEVANCE TO PUBLIC HEALTH	64
2.6	BIOMARKERS OF EXPOSURE AND EFFECT	77
2.6.1	Biomarkers Used to Identify or Quantify Exposure to Toxaphene	78
2.6.2	Biomarkers Used to Characterize Effects Caused by Toxaphene	79
2.7	INTERACTIONS WITH OTHER SUBSTANCES	79
2.8	POPULATIONS THAT ARE UNUSUALLY SUSCEPTIBLE	80
2.9	METHODS FOR REDUCING TOXIC EFFECTS	83
2.9.1	Reducing Peak Absorption Following Exposure	83
2.9.2	Reducing Body Burden	84
2.9.3	Interfering with the Mechanism of Action for Toxic Effects	84
2.10	ADEQUACY OF THE DATABASE	85
2.10.1	Existing Information on Health Effects of Toxaphene	85
2.10.2	Identification of Data Needs	87
2.10.3	Ongoing Studies	94
3.	CHEMICAL AND PHYSICAL INFORMATION	95
3.1	CHEMICAL IDENTITY	95
3.2	PHYSICAL AND CHEMICAL PROPERTIES	95
4.	PRODUCTION, IMPORT/EXPORT, USE, AND DISPOSAL	99
4.1	PRODUCTION	99
4.2	IMPORT/EXPORT	101
4.3	USE	101
4.4	DISPOSAL	102

4.4	DISPOSAL	102
5.	POTENTIAL FOR HUMAN EXPOSURE	105
5.1	OVERVIEW	105
5.2	RELEASES TO THE ENVIRONMENT	108
5.2.1	Air	108
5.2.2	Water	109
5.2.3	Soil	110
5.3	ENVIRONMENTAL FATE	110
5.3.1	Transport and Partitioning	110
5.3.2	Transformation and Degradation	119
5.3.2.1	Air	119
5.3.2.2	Water	119
5.3.2.3	Sediment and Soil	120
5.4	LEVELS MONITORED OR ESTIMATED IN THE ENVIRONMENT	121
5.4.1	Air	122
5.4.2	Water	123
5.4.3	Sediment and Soil	125
5.4.4	Other Environmental Media	127
5.5	GENERAL POPULATION AND OCCUPATIONAL EXPOSURE	132
5.6	POPULATIONS WITH POTENTIALLY HIGH EXPOSURES	133
5.7	ADEQUACY OF THE DATABASE	135
5.7.1	Identification of Data Needs	136
5.7.2	Ongoing Studies	141
6.	ANALYTICAL METHODS	143
6.1	BIOLOGICAL SAMPLES	143
6.2	ENVIRONMENTAL SAMPLES	147
6.3	ADEQUACY OF THE DATABASE	159
6.3.1	Identification of Data Needs.	159
6.3.2	Ongoing Studies	161
7.	REGULATIONS AND ADVISORIES	163
8.	REFERENCES	179
9.	GLOSSARY	213
APPENDICES		
A.	MINIMAL RISK LEVEL (MRL) WORKSHEET(S)	A-3
B.	USER'S GUIDE	B-1
C.	ACRONYMS, ABBREVIATIONS, AND SYMBOLS	C-1

LIST OF FIGURES

2-1	Levels of Significant Exposure to Toxaphene—Inhalation	12
2-2	Levels of Significant Exposure to Toxaphene—Oral	30
2-3	Proposed Metabolic Scheme for a Toxicant Isolated from Toxaphene	55
2-4	Existing Information on Health Effects of Toxaphene	86
5-1	Frequency of NPL Sites with Toxaphene Contamination	107

LIST OF TABLES

2-1	Levels of Significant Exposure to Toxaphene—Inhalation	11
2-2	Levels of Significant Exposure to Toxaphene—Oral	18
2-3	Levels of Significant Exposure to Toxaphene—Dermal	44
2-4	Mean Toxaphene Residues in Cows Following Oral Exposure to Toxaphene	52
2-5	Summary of Excretion Data: Percentage of Dose Excreted in Urine and Feces Following Oral Administration of Radiolabeled Toxaphene and its Components	60
2-6	Toxaphene Levels in Milk from Cows Fed Toxaphene in Their Diet	62
2-7	Identified Toxic Components of Toxaphene	68
2-8	Genotoxicity of Toxaphene <i>In Vivo</i>	74
2-9	Genotoxicity of Toxaphene <i>In Vitro</i>	75
3-1	Chemical Identity of Toxaphene	96
3-2	Physical and Chemical Properties of Toxaphene	97
5-1	Toxaphene Levels Detected in Tissue Samples of Aquatic Animals from the Yazoo National Wildlife Refuge, Mississippi, in 1988	118
6-1	Analytical Methods for Determining Toxaphene in Biological Samples	144
6-2	Analytical Methods for Determining Toxaphene in Environmental Samples	148
7-1	Regulations and Guidelines Applicable to Toxaphene	165