



Toxicological Profile for 1,2-Dichloroethane

July 2024



U.S. Department of Health and Human Services
Agency for Toxic Substances and Disease Registry

DISCLAIMER

Use of trade names is for identification only and does not imply endorsement by the Agency for Toxic Substances and Disease Registry, the Public Health Service, or the U.S. Department of Health and Human Services.

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 these toxic substances described therein. Each peer-reviewed profile identifies and reviews the key literature that describes a 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 relevance to public health discussion which would allow a public health professional to make a real-time determination of whether the presence of a particular substance in the environment poses a potential threat to human health. 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 the protection of public health are identified by ATSDR.

Each profile includes the following:

- (A) The examination, summary, and interpretation of available toxicologic information and epidemiologic evaluations on a toxic substance to ascertain the levels of significant human exposure for the substance due to associated acute, intermediate, and chronic exposures;
- (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, intermediate, 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 audiences for the toxicological profiles are 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. Staffs 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 under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended (CERCLA or Superfund). CERCLA section 104(i)(1) directs the Administrator of ATSDR to "...effectuate and implement the health related authorities" of the statute. This includes the preparation of toxicological profiles for hazardous substances most commonly found at facilities on the CERCLA National Priorities List (NPL) and that pose the most significant potential threat to human health, as determined by ATSDR and the EPA. Section 104(i)(3) of CERCLA, as amended, directs the Administrator of ATSDR to prepare a toxicological profile for each substance on the list. In addition, ATSDR has the authority to prepare toxicological profiles for substances not found at sites on the NPL, in an effort to "...establish and maintain inventory of literature, research, and studies on the health effects of toxic substances" under CERCLA Section 104(i)(1)(B), to respond to requests for consultation under section 104(i)(4), and as otherwise necessary to support the site-specific response actions conducted by ATSDR.

VERSION HISTORY

Date	Description
July 2024	Final toxicological profile released
January 2022	Draft for public comment toxicological profile released
September 2001	Final toxicological profile released

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ATSDR scientists review peer reviewers' comments and determine whether changes will be made to the profile based on comments. The peer reviewers' comments and responses to these comments are part of the administrative record for this compound.

The listing of peer reviewers should not be understood to imply their approval of the profile's final content. The responsibility for the content of this profile lies with ATSDR.

CONTENTS

DISCLAIMER	ii
FOREWORD	iii
VERSION HISTORY	v
CONTRIBUTORS & REVIEWERS	vi
CONTENTS	viii
LIST OF FIGURES	x
LIST OF TABLES	xi
CHAPTER 1. RELEVANCE TO PUBLIC HEALTH	1
1.1 OVERVIEW AND U.S. EXPOSURES	1
1.2 SUMMARY OF HEALTH EFFECTS	2
1.3 MINIMAL RISK LEVELS (MRLs)	8
CHAPTER 2. HEALTH EFFECTS	13
2.1 INTRODUCTION	13
2.2 DEATH	53
2.3 BODY WEIGHT	55
2.4 RESPIRATORY	57
2.5 CARDIOVASCULAR	59
2.6 HEMATOLOGICAL	60
2.7 MUSCULOSKELETAL	62
2.8 HEPATIC	62
2.9 RENAL	66
2.10 DERMAL	68
2.11 OCULAR	69
2.12 GASTROINTESTINAL	70
2.13 ENDOCRINE	71
2.14 IMMUNOLOGICAL	72
2.15 NEUROLOGICAL	74
2.16 REPRODUCTIVE	79
2.17 DEVELOPMENTAL	81
2.18 OTHER NONCANCER	83
2.19 CANCER	83
2.20 GENOTOXICITY	86
CHAPTER 3. TOXICOKINETICS, SUSCEPTIBLE POPULATIONS, BIOMARKERS, CHEMICAL INTERACTIONS	93
3.1 TOXICOKINETICS	93
3.1.1 Absorption	93
3.1.2 Distribution	98
3.1.3 Metabolism	101
3.1.4 Excretion	105
3.1.5 Physiologically Based Pharmacokinetic (PBPK)/Pharmacodynamic (PD) Models	107
3.1.6 Animal-to-Human Extrapolations	109
3.2 CHILDREN AND OTHER POPULATIONS THAT ARE UNUSUALLY SUSCEPTIBLE	109
3.2.1 Children's Susceptibility	110

3.2.2	Other Populations that are Unusually Susceptible	113
3.3	BIOMARKERS OF EXPOSURE AND EFFECT	114
3.3.1	Biomarkers of Exposure.....	115
3.3.2	Biomarkers of Effect.....	117
3.4	INTERACTIONS WITH OTHER CHEMICALS	118
CHAPTER 4. CHEMICAL AND PHYSICAL INFORMATION		122
4.1	CHEMICAL IDENTITY	122
4.2	PHYSICAL AND CHEMICAL PROPERTIES	122
CHAPTER 5. POTENTIAL FOR HUMAN EXPOSURE		125
5.1	OVERVIEW	125
5.2	PRODUCTION, IMPORT/EXPORT, USE, AND DISPOSAL	126
5.2.1	Production	126
5.2.2	Import/Export.....	128
5.2.3	Use	128
5.2.4	Disposal.....	129
5.3	RELEASES TO THE ENVIRONMENT	130
5.3.1	Air	131
5.3.2	Water.....	132
5.3.3	Soil	133
5.4	ENVIRONMENTAL FATE	133
5.4.1	Transport and Partitioning.....	133
5.4.2	Transformation and Degradation	135
5.5	LEVELS IN THE ENVIRONMENT.....	137
5.5.1	Air	139
5.5.2	Water.....	142
5.5.3	Sediment and Soil	143
5.5.4	Other Media	144
5.6	GENERAL POPULATION EXPOSURE.....	144
5.7	POPULATIONS WITH POTENTIALLY HIGH EXPOSURES	148
CHAPTER 6. ADEQUACY OF THE DATABASE.....		150
6.1	INFORMATION ON HEALTH EFFECTS.....	150
6.2	IDENTIFICATION OF DATA NEEDS	152
6.3	ONGOING STUDIES.....	165
CHAPTER 7. REGULATIONS AND GUIDELINES		166
CHAPTER 8. REFERENCES		169
APPENDICES		
APPENDIX A. ATSDR MINIMAL RISK LEVEL WORKSHEETS		A-1
APPENDIX B. LITERATURE SEARCH FRAMEWORK FOR 1,2-DICHLOROETHANE		B-1
APPENDIX C. USER'S GUIDE		C-1
APPENDIX D. QUICK REFERENCE FOR HEALTH CARE PROVIDERS		D-1
APPENDIX E. GLOSSARY		E-1
APPENDIX F. ACRONYMS, ABBREVIATIONS, AND SYMBOLS		F-1

LIST OF FIGURES

1-1. Health Effects Found in Animals Following Inhalation Exposure to 1,2-Dichloroethane.....	3
1-2. Health Effects Found in Animals Following Oral Exposure to 1,2-Dichloroethane.....	4
1-3. Summary of Sensitive Targets of 1,2-Dichloroethane – Inhalation	10
1-4. Summary of Sensitive Targets of 1,2-Dichloroethane – Oral	11
2-1. Overview of the Number of Studies Examining 1,2-Dichloroethane Health Effects.....	16
2-2. Levels of Significant Exposure to 1,2-Dichloroethane – Inhalation.....	29
2-3. Levels of Significant Exposure to 1,2-Dichloroethane – Oral.....	46
3-1. Proposed Pathways for 1,2-Dichloroethane Metabolism	102
5-1. Number of NPL Sites with 1,2-Dichloroethane Contamination.....	125
6-1. Summary of Existing Health Effects Studies on 1,2-Dichloroethane by Route and Endpoint.....	151

LIST OF TABLES

1-1. Minimal Risk Levels (MRLs) for 1,2-Dichloroethane	12
2-1. Levels of Significant Exposure to 1,2-Dichloroethane – Inhalation.....	17
2-2. Levels of Significant Exposure to 1,2-Dichloroethane – Oral.....	37
2-3. Genotoxicity of 1,2-Dichloroethane <i>In Vitro</i>	87
2-4. Genotoxicity of 1,2-Dichloroethane <i>In Vivo</i>	88
4-1. Chemical Identity of 1,2-Dichloroethane	122
4-2. Physical and Chemical Properties of 1,2-Dichloroethane	123
5-1. Facilities that Produce, Process, or Use 1,2-Dichloroethane	127
5-2. Releases to the Environment from Facilities that Produce, Process, or Use 1,2-Dichloroethane	131
5-3. Lowest Limit of Detection for 1,2-Dichloroethane Based on Standards.....	138
5-4. 1,2-Dichloroethane Levels in Water, Soil, and Air of National Priorities List (NPL) Sites.....	138
5-5. Percentile Distribution of Annual Mean 1,2-Dichloroethane Concentrations (ppbC) Measured in Ambient Air at Locations Across the United States	139
5-6. Estimated Population Exposure to 1,2-Dichloroethane Through Releases to Ambient Air from a Number of Specific Emission Sources.....	146
7-1. Regulations and Guidelines Applicable to 1,2-Dichloroethane.....	166