



# Toxicological Profile for Cyanide

Draft for Public Comment

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

## **DISCLAIMER**

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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 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 and the associated acute, intermediate, 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 the levels of exposure that present a significant risk to human health due to acute-, intermediate-, and chronic-duration exposures; 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. ATSDR plans to revise these documents in response to public comments and as additional data become available. Therefore, we encourage comments that will make the toxicological profile series of the greatest use.

Electronic comments may be submitted via: [www.regulations.gov](http://www.regulations.gov). Follow the on-line instructions for submitting comments.

Written comments may also be sent to: Agency for Toxic Substances and Disease Registry  
Office of Innovation and Analytics  
Toxicology Section  
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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.

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 is being made available for public review. Final responsibility for the contents and views expressed in this toxicological profile resides with ATSDR.



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## VERSION HISTORY

Date	Description
October 2024	Draft for public comment toxicological profile released
July 2006	Toxicological profile released
September 1997	Toxicological profile released
April 1993	Toxicological profile released
December 1989	Toxicological profile released

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These experts collectively have knowledge of toxicology, chemistry, and/or health effects. All reviewers were selected in conformity with Section 104(I)(13) of the Comprehensive Environmental Response, Compensation, and Liability Act, as amended.

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 .....	vii
LIST OF FIGURES .....	ix
LIST OF TABLES .....	x
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 .....	11
2.1 INTRODUCTION .....	11
2.2 DEATH .....	46
2.3 BODY WEIGHT .....	49
2.4 RESPIRATORY .....	51
2.5 CARDIOVASCULAR .....	57
2.6 GASTROINTESTINAL .....	61
2.7 HEMATOLOGICAL .....	62
2.8 MUSCULOSKELETAL .....	64
2.9 HEPATIC .....	64
2.10 RENAL .....	67
2.11 DERMAL .....	70
2.12 OCULAR .....	71
2.13 ENDOCRINE .....	72
2.14 IMMUNOLOGICAL .....	78
2.15 NEUROLOGICAL .....	79
2.16 REPRODUCTIVE .....	95
2.17 DEVELOPMENTAL .....	97
2.18 OTHER NONCANCER .....	99
2.19 CANCER .....	100
2.20 GENOTOXICITY .....	100
2.21 MECHANISMS OF ACTION .....	104
CHAPTER 3. TOXICOKINETICS, SUSCEPTIBLE POPULATIONS, BIOMARKERS, CHEMICAL INTERACTIONS .....	106
3.1 TOXICOKINETICS .....	106
3.1.1 Absorption .....	106
3.1.2 Distribution .....	109
3.1.3 Metabolism .....	111
3.1.4 Excretion .....	115
3.1.5 Physiologically Based Pharmacokinetic (PBPK)/Pharmacodynamic (PD) Models .....	116
3.1.6 Animal-to-Human Extrapolations .....	118
3.2 CHILDREN AND OTHER POPULATIONS THAT ARE UNUSUALLY SUSCEPTIBLE .....	119

3.3	BIOMARKERS OF EXPOSURE AND EFFECT .....	122
3.3.1	Biomarkers of Exposure.....	123
3.3.2	Biomarkers of Effect.....	126
3.4	INTERACTIONS WITH OTHER CHEMICALS .....	127
CHAPTER 4. CHEMICAL AND PHYSICAL INFORMATION .....		132
4.1	CHEMICAL IDENTITY .....	132
4.2	PHYSICAL AND CHEMICAL PROPERTIES .....	133
CHAPTER 5. POTENTIAL FOR HUMAN EXPOSURE .....		140
5.1	OVERVIEW .....	140
5.2	PRODUCTION, IMPORT/EXPORT, USE, AND DISPOSAL .....	144
5.2.1	Production .....	144
5.2.2	Import/Export.....	147
5.2.3	Use .....	148
5.2.4	Disposal.....	150
5.3	RELEASES TO THE ENVIRONMENT .....	152
5.3.1	Air .....	152
5.3.2	Water .....	155
5.3.3	Soil .....	157
5.4	ENVIRONMENTAL FATE .....	158
5.4.1	Transport and Partitioning.....	158
5.4.2	Transformation and Degradation .....	160
5.5	LEVELS IN THE ENVIRONMENT .....	168
5.5.1	Air .....	170
5.5.2	Water.....	170
5.5.3	Sediment and Soil .....	172
5.5.4	Other Media .....	172
5.6	GENERAL POPULATION EXPOSURE.....	175
5.7	POPULATIONS WITH POTENTIALLY HIGH EXPOSURES .....	178
CHAPTER 6. ADEQUACY OF THE DATABASE.....		188
6.1	EXISTING INFORMATION ON HEALTH EFFECTS .....	188
6.2	IDENTIFICATION OF DATA NEEDS .....	188
6.3	ONGOING STUDIES.....	200
CHAPTER 7. REGULATIONS AND GUIDELINES .....		202
CHAPTER 8. REFERENCES .....		208
APPENDICES		
APPENDIX A.	ATSDR MINIMAL RISK LEVEL WORKSHEETS .....	A-1
APPENDIX B.	LITERATURE SEARCH FRAMEWORK FOR CYANIDE .....	B-1
APPENDIX C.	FRAMEWORK FOR ATSDR'S SYSTEMATIC REVIEW OF HEALTH EFFECTS DATA FOR CYANIDE.....	C-1
APPENDIX D.	USER'S GUIDE.....	D-1
APPENDIX E.	QUICK REFERENCE FOR HEALTH CARE PROVIDERS .....	E-1
APPENDIX F.	GLOSSARY .....	F-1
APPENDIX G.	ACRONYMS, ABBREVIATIONS, AND SYMBOLS.....	G-1



## LIST OF FIGURES

1-1. Health Effects Found in Animals Following Inhalation Exposure to Cyanide .....	4
1-2. Health Effects Found in Animals Following Oral Exposure to Cyanide.....	4
1-3. Summary of Sensitive Targets of Cyanide – Inhalation .....	8
1-4. Summary of Sensitive Targets of Cyanide – Oral .....	9
2-1. Overview of the Number of Studies Examining Cyanide Health Effects .....	16
2-2. Levels of Significant Exposure to Hydrogen Cyanide – Inhalation .....	19
2-3. Levels of Significant Exposure to Cyanide – Oral .....	33
3-1. Basic Processes Involved in the Metabolism of Cyanide .....	112
3-2. Minor Path for the Removal of Cyanide from the Body .....	114
5-1. Number of NPL Sites with Cyanide Contamination .....	140
6-1. Summary of Existing Health Effects Studies on Cyanide by Route and Endpoint .....	189

## LIST OF TABLES

1-1. Minimal Risk Levels (MRLs) for Cyanide.....	10
2-1. Levels of Significant Exposure to Hydrogen Cyanide – Inhalation .....	17
2-2. Levels of Significant Exposure to Cyanide – Oral .....	21
2-3. Levels of Significant Exposure to Cyanide – Dermal .....	43
2-4. Results of Select Epidemiological Studies Evaluating Occupational Exposure to Cyanide and Respiratory Effects .....	52
2-5. Results of Epidemiological Studies Evaluating Occupational Exposure to Cyanide and Thyroid Effects.....	73
2-6. Results of Epidemiological Studies Evaluating Occupational Exposure to Cyanide and Neurological Effects .....	80
2-7. Genotoxicity of Cyanide <i>In Vivo</i> .....	101
2-8. Genotoxicity of Cyanide <i>In Vitro</i> .....	102
4-1. Chemical Identity of Cyanide and Compounds.....	132
4-2. Physical and Chemical Properties of Cyanide and Compounds.....	134
5-1. Facilities that Produce, Process, or Use Cyanide Compounds .....	144
5-2. Nationally Aggregated Production Volume for Cyanide Compounds .....	145
5-3. Import and Export Volumes of Cyanide Compounds in 2004 .....	147
5-4. Releases to the Environment from Facilities that Produce, Process, or Use Cyanide Compounds.....	152
5-5. Pounds of Cyanide Emitted by Sector .....	155
5-6. Environmental Transformation Products of Cyanide Compounds by Medium .....	160
5-7. Lowest Limit of Detection for Cyanide Anion based on Standards .....	169
5-8. Summary of Environmental Levels of Cyanide .....	169
5-9. Cyanide Levels in Water, Soil, and Air of National Priorities List (NPL) Sites .....	169
5-10. Reasonable Maximum Exposure Daily Inhalation Concentration and Administered Dermal Dose of Hydrogen Cyanide for the Target Person.....	177
5-11. Urinary Thiocyanate Concentrations (mg/L) in the Cigarette Smoking U.S. General Population.....	179
5-12. Urinary Thiocyanate Concentrations (mg/L) in the Nonsmoking U.S. General Population .....	180

5-13. Urinary Thiocyanate Concentrations (Creatinine Corrected) ( $\mu\text{g/g}$ Creatinine) in the Cigarette Smoking U.S. General Population .....	181
5-14. Urinary Thiocyanate Concentrations (Creatinine Corrected) ( $\mu\text{g/g}$ Creatinine) in the Nonsmoking U.S. General Population .....	182
5-15. Cyanide and Thiocyanate Concentrations ( $\mu\text{g/mL}$ ) in Smokers and Nonsmokers .....	183
6-1. Ongoing Studies on Cyanide .....	201
7-1. Regulations and Guidelines Applicable to Cyanide .....	202