TOXICOLOGICAL PROFILE FOR STODDARD SOLVENT

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES Public Health Service

Agency for Toxic Substances and Disease Registry

STODDARD SOLVENT ii

DISCLAIMER

The use of company or product name(s) is for identification only and does not imply endorsement by the Agency for Toxic Substances and Disease Registry.

STODDARD SOLVENT iii

UPDATE STATEMENT

A Toxicological Profile for Stoddard solvent was released on November 1993. 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 ATSDR and the Environmental Protection Agency (EPA) and in support of Department of Defense information needs. The original guidelines were published in the <u>Federal Register</u> 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 being described. Each profile identifies and reviews the key literature (that has been peer-reviewed) that describes a hazardous substance's toxicologic properties. Other pertinent literature is also presented, but 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.

Each toxicological profile begins with a public health statement, which describes in nontechnical language a substance's relevant toxicological properties. Following the public health statement is information concerning levels of significant human exposure and, when 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 significant to protect public health will be identified by ATSDR and the EPA. The focus of the profiles is on health and toxicologic information; therefore, we have included this information in the beginning of the document.

Each profile must include the following:

- (A) The examination, summary, and interpretation of available toxicologic information and epidemiologic evaluations on a hazardous substance in order 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.
- (C) When appropriate, identification of toxicologic testing needed to identify the types or levels of exposure that might 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.

The toxicological profiles are developed in response to the Superfund Amendments and Reauthorization Act (SARA) of 1986 (Public Law 99-499) which amended the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA or Superfund). Section 211 of SARA also amended Title 10 of the U. S. Code, creating the Defense Environmental Restoration Program. Section 2704(a) of Title 10 of the U. S. Code directs the Secretary of Defense to notify the Secretary of Health and Human Services of not less than 25 of the most commonly found unregulated hazardous substances at defense facilities.

Section 2704(b) of Title 10 of the U. S. Code directs the Administrator of the Agency for Toxic Substances and Disease Registry (ATSDR) to prepare a toxicological profile for each substance on the list provided by the Secretary of Defense under subsection (b).

Foreword

This profile reflects our assessment of all relevant toxicologic testing and information that has been peer reviewed. It has been reviewed by scientists from ATSDR, the Centers for Disease Control and Prevention (CDC), and other federal agencies. It has also been reviewed by a panel of nongovernment peer reviewers and was made available for public review. Final responsibility for the contents and views expressed in this toxicological profile resides with ATSDR.

David Satcher, M.D., Ph.D.

Administrator

Agency for Toxic Substances and Disease Registry

STODDARD SOLVENT vii

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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 MRLs.
- 4. Quality Assurance Review. The Quality Assurance Branch assures that consistency across profiles is maintained, identifies any significant problems in format or content, and establishes that Guidance has been followed.

STODDARD SOLVENT ix

PEER REVIEW

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

- 1. Mr. Lyman Skory, Private Consultant, Skory Consulting, Midland, Michigan
- 2. Mr. Edwin Kinkead, Research Scientist, Mantech Environmental Technology, Inc., Wright-Patterson AFB, Ohio
- 3. Dr. Martin Alexander, Professor, Soil Microbiology, Cornell University, Ithaca, New York
- 4. Dr. Richard Stewart, Adjunct Professor of Pharmacology and Toxicology, Clinical Professor of Internal Medicine, The Medical College of Wisconsin, Milwaukee, Wisconsin
- 5. Dr. Carson Conaway, Division of Pathology/Toxicology, American Health Foundation, Valhalla, New York

These experts collectively have knowledge of Stoddard solvent'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

FC	DREW	ORD			V
CC	ONTR	IBUTO	RS		vii
PE	ER R	EVIEW	<i>7</i>		ix
LI	ST OF	FIGU	RES		χv
LI	ST OI	F TABL	LES		vii
1.	1.1 1.2 1.3 1.4 1.5 1.6	WHAT WHAT ENVII HOW HOW HOW IS TH EXPO WHAT PROT	I IS STO I HAPPE RONME! MIGHT CAN ST CAN ST ERE A M SED TO I RECO! ECT HU	TATEMENT DDDARD SOLVENT? ENS TO STODDARD SOLVENT WHEN IT ENTERS THE NT? I BE EXPOSED TO STODDARD SOLVENT? DODDARD SOLVENT ENTER AND LEAVE MY BODY? DODDARD SOLVENT AFFECT MY HEALTH? MEDICAL TEST TO DETERMINE WHETHER I HAVE BEEN STODDARD SOLVENT? MMENDATIONS HAS THE FEDERAL GOVERNMENT MADE TO MAN HEALTH?	2 2 3 4 4 6
	1.8	WHEI	RE CAN	I GET MORE INFORMATION?	7
2.	HEA				
	2.1			ON	
	2.2			OF HEALTH EFFECTS BY ROUTE OF EXPOSURE	
		2.2.1		<u> </u>	11
			2.2.1.1		23
			2.2.1.2		24
			2.2.1.3	• •	34
			2.2.1.4	S .	35
			2.2.1.5	•	37
			2.2.1.6	*	37
			2.2.1.7 2.2.1.8		38
		2.2.2			38
		2.2.4	2.2.2.1	•	38 39
			2.2.2.1		<i>3</i> 9
			2.2.2.3	•	39 39
			2.2.2.4	• • •	<i>39</i>
			2.2.2.5	-	39
			2.2.2.6		39
			2.2.2.7		39
			2.2.2.8		39
		2.2.3			39
			2.2.3.1	-	<i>4</i> 1
					. 1

STODDARD SOLVENT xii

		•		41
			eticular Effects	42
		_		42
				43
		2.2.3.6 Developmental Effects		43
		2.2.3.7 Genotoxic Effects		43
		2.2.3.8 Cancer		43
	2.3	TOXICOKINETICS		44
				45
		A		45
		•		46
		±		47
		1		47
		*		47
		<u>=</u>		49
				49
				49
				50
		2.3.4.1 Inhalation Exposure		50
		2.3.4.2 Oral Exposure		50
		2.3.4.3 Dermal Exposure		51
		2.3.5 Mechanisms of Action		51
	2.4	RELEVANCE TO PUBLIC HEALTH		52
	2.5	BIOMARKERS OF EXPOSURE AND EFFE		67
			fy Exposure to Stoddard Solvent	68
			ets Caused by Stoddard Solvent	69
	2.6	INTERACTIONS WITH OTHER CHEMICA		69
	2.7	POPULATIONS THAT ARE UNUSUALLY		70
	2.8	METHODS FOR REDUCING TOXIC EFFEC		70
	2.0			
			osure	71
				71
	•	•	ion for Toxic Effects	72
	2.9	ADEQUACY OF THE DATABASE		72
			of Stoddard Solvent	73
		2.9.2 Identification of Data Needs	• • • • • • • • • • • • • • • • • • • •	73
		2.9.3 On-going Studies		79
3.	CHE	MICAL AND PHYSICAL INFORMATION .		81
	3.1	CHEMICAL IDENTITY		81
	3.2	PHYSICAL AND CHEMICAL PROPERTIES		81
4.	PRO	DUCTION, IMPORT, USE, AND DISPOSAL		87
	4.1	PRODUCTION		87
	4.2	IMPORT/EXPORT		87
	4.3	USE		87
	4.4	DISPOSAL		88
	4.4	DISTOSAL	• • • • • • • • • • • • • • • • • • • •	00
ς .	р∩ті	ENTIAL COD HIMANI EXPOSIDE		00
٠.		ENTIAL FOR HUMAN EXPOSURE		89
	5.1	OVERVIEW		89

STODDARD SOLVENT xiii

	5.2	RELEASES TO THE ENVIRONMENT	90
		5.2.1 Air	92
		5.2.2 Water	92
		5.2.3 Soil	92
	5.3	ENVIRONMENTAL FATE	93
		5.3.1 Transport and Partitioning	93
		5.3.2 Transformation and Degradation	94
		5.3.2.1 Air	94
		5.3.2.2 Water	95
		5.3.2.3 Soil	95
	5.4	LEVELS MONITORED OR ESTIMATED IN THE ENVIRONMENT	96
		5.4.1 Air	96
		5.4.2 Water	97
		5.4.3 Soil	97
		5.4.4 Other Environmental Media	98
	5.5	GENERAL POPULATION AND OCCUPATIONAL EXPOSURE	98
	5.6	POPULATIONS WITH POTENTIALLY HIGH EXPOSURES	98
	5.7	ADEQUACY OF THE DATABASE	99
		5.7.1 Identification of Data Needs	99
		5.7.2 On-going Studies	
6.	ANA	ALYTICAL METHODS	103
	6.1	BIOLOGICAL MATERIALS	
	6.2	ENVIRONMENTAL SAMPLES	
	6.3	ADEQUACY OF THE DATABASE	
		6.3.1 Identification of Data Needs	
		6.3.2 On-going Studies	
7.	REG	ULATIONS AND ADVISORIES 1	111
8.	REF	ERENCES	115
9.	GLO	SSARY 1	137
ΑF	PENI	DICES	
	A. U	USER'S GUIDE	4 -1
			- 1
	B. A	ACRONYMS, ABBREVIATIONS, AND SYMBOLS	B-1
		,	

STODDARD SOLVENT xv

LIST OF FIGURES

2-1.	Levels of Significant Exposure to Stoddard Solvent - Inhalation	21
2-2.	Existing Information on Health Effects of Stoddard Solvent	74
5-1.	Frequency of NPL Sites with Stoddard Solvent Contamination	91

STODDARD SOLVENT xvii

LIST OF TABLES

2-1.	Levels of Significant Exposure to Stoddard Solvent - Inhalation	12
2-2.	Levels of Significant Exposure to Stoddard Solvent - Dermal	40
2-3.	Genotoxicity of Stoddard Solvent and Related Compounds In Vivo	64
2-4.	Genotoxicity of Stoddard Solvent and Related Compounds In Vitro	65
3-1.	Chemical Identity of Stoddard Solvent	82
3-2.	Physical and Chemical Properties of Stoddard Solvent	83
3-3.	Possible Formulations of Stoddard Solvent	84
6-1.	Analytical Methods for Determining Stoddard Solvent in Biological Materials	104
6-2.	Analytical Methods for Determining Stoddard Solvent in Environmental Samples	106
7-1.	Regulations and Guidelines Applicable to Stoddard Solvent	112