

Version	Revision Date:	US / Z8	Date of last issue: 02/02/2023
2.2	03/21/2023		Date of first issue: 12/20/2012

### **SECTION 1. IDENTIFICATION**

Product name	:	Ethylene Diamine (EDA)
Manufacturer or supplier' Distributor information	s details :	Silver Fern Chemical, Inc. 2226 Queen Anne Avenue North
Address		Seattle WA 98109, USA
Telephone E-mail address Emergency telephone	: :	Phone: 1-866-282-3384 Info@silverfernchemical.com <b>24 Hour Emergency Contact</b>
Decommonded use of the	- <b>h</b> i	Infotrac 1-800-535-5053 (USA & Canada) Outside USA & Canada 1-352-323-3500

Recommended use of the chemical and restrictions on use Recommended use : Various industrial applications

### **SECTION 2. HAZARDS IDENTIFICATION**

# GHS classification in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200)

Flammable liquids	:	Category 3
Acute toxicity (Oral)	:	Category 4
Acute toxicity (Inhalation)	:	Category 4
Acute toxicity (Dermal)	:	Category 3
Skin corrosion	:	Category 1B
Serious eye damage	:	Category 1
Respiratory sensitization	:	Sub-category 1B
Skin sensitization	:	Sub-category 1B
Short-term (acute) aquatic hazard	:	Category 3
Long-term (chronic) aquatic hazard	:	Category 3

#### **GHS** label elements

Silver Fern Chemical, Inc. Safety Data Sheet Ethylene Diamine Page 1 of 17



Version 2.2	Revision Date: 03/21/2023	US / Z8	Date of last issue: 02/02/2023 Date of first issue: 12/20/2012
Haza	rd pictograms :		چه 📀
Signa	al Word	: Danger	
Haza	rd Statements	H302 + H332 H311 Toxic i H314 Cause H317 May ca H334 May ca breathing dif	able liquid and vapor. 2 Harmful if swallowed or if inhaled. n contact with skin. s severe skin burns and eye damage. ause an allergic skin reaction. ause allergy or asthma symptoms or ficulties if inhaled. Il to aquatic life with long lasting effects.
Preca	autionary Statements	surfaces. No P233 Keep of P240 Ground P241 Use ex equipment. P242 Use or P243 Take p charge. P261 Avoid b	ontainer tightly closed. d/bond container and receiving equipment. plosion-proof electrical/ ventilating/ lighting/ ly non-sparking tools. recautionary measures against static dis- preathing mist or vapors.
		P270 Do not uct. P271 Use or P272 Contar out of the wo P273 Avoid r P280 Wear p protection/ fa	skin thoroughly after handling. eat, drink or smoke when using this prod- ly outdoors or in a well-ventilated area. ninated work clothing must not be allowed rkplace. elease to the environment. protective gloves/ protective clothing/ eye ace protection. e of inadequate ventilation wear respiratory
		Response: P301 + P312 CENTER/ dc P301 + P330 NOT induce P303 + P361 mediately all ter/ shower. P304 + P340	<ul> <li>P + P330 IF SWALLOWED: Call a POISON ctor if you feel unwell. Rinse mouth.</li> <li>+ P331 IF SWALLOWED: Rinse mouth. Do vomiting.</li> <li>+ P353 IF ON SKIN (or hair): Take off imcontaminated clothing. Rinse skin with wa-</li> <li>+ P310 IF INHALED: Remove person to keep comfortable for breathing. Immediately</li> </ul>

Silver Fern Chemical, Inc. Safety Data Sheet Ethylene Diamine Page 2 of 17



Revision Date: 03/21/2023

Date of last issue: 02/02/2023 Date of first issue: 12/20/2012

call a POISON CENTER/ doctor.

P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/ doctor. P333 + P313 If skin irritation or rash occurs: Get medical

advice/ attention. P342 + P311 If experiencing respiratory symptoms: Call

a POISON CENTER/ doctor.

P362 Take off contaminated clothing and wash before reuse.

P370 + P378 In case of fire: Use vermiculite, dry chemical powder or dry sand for extinction.

#### Storage:

US / Z8

P403 + P235 Store in a well-ventilated place. Keep cool. P405 Store locked up.

#### Disposal:

: 107-15-3

P501 Dispose of contents/ container to an approved waste disposal plant.

### Other hazards

None known.

### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixtu Substance name	 Substance ETHYLENEDIAMINE (EDA)

CAS-No.

Components

Chemical name	CAS-No.	Concentration (% w/w)			
Ethylenediamine	107-15-3	>= 90 - <= 100			
Actual concentration is withheld as a trade secret					

Actual concentration is withheld as a trade secret

### **SECTION 4. FIRST AID MEASURES**

General advice	Immediate medical attention is required. Move out of dangerous area. Show this material safety data sheet to the d attendance. Symptoms of poisoning may appear several	
If inhaled	If breathed in, move person into fresh air. Consult a physician after significant exposure	9.

Silver Fern Chemical, Inc. Safety Data Sheet Ethylene Diamine Page 3 of 17



Versio 2.2	n	Revision Date: 03/21/2023	US	s / Z8	Date of last issue: 02/02/2023 Date of first issue: 12/20/2012
In case of skin contact		:	Rinse imme Immediate r	taminated clothing and shoes immediately. diately with plenty of water. nedical treatment is necessary as untreated n corrosion of the skin heal slowly and with	
In	ı case	of eye contact	:	Rinse with p Get medical transport of Remove cor Protect unha Keep eye w Small amou	itact lenses. armed eye. de open while rinsing. nts splashed into eyes can cause irreversible
lf	swallo	owed	:	Clean mouth Never give a Take victim	ge and blindness. In with water and drink afterwards plenty of water. Anything by mouth to an unconscious person. Anything by mouth to an unconscious person. Anything way to anything any service and the ser
ar		portant symptoms ects, both acute and I	:	The sympto as shown in are known. Harmful if sy Toxic in con May cause a Causes seri	
N	otes to	o physician	:	Treat sympt	

## SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media	:	Carbon dioxide (CO2) Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Specific hazards during fire fighting	:	Water spray may be ineffective unless used by experienced firefighters. Do not allow run-off from fire fighting to enter drains or water courses.
Hazardous combustion prod- ucts	:	Carbon oxides Nitrogen oxides (NOx)
Further information	:	Use water spray to cool unopened containers. Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

Silver Fern Chemical, Inc. Safety Data Sheet Ethylene Diamine Page 4 of 17



VersionRevision Date:US / Z8Date of last issue: 02/02/20232.203/21/2023Date of first issue: 12/20/2012		
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		For safety reasons in case of fire, cans should be stored separately in closed containments.
Special protective equipment for fire-fighters	:	In the event of fire, wear self-contained breathing apparatus.

### SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protec- : tive equipment and emer- gency procedures	Use personal protective equipment. Wear respiratory protection. Ensure adequate ventilation. Remove all sources of ignition. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas. Evacuate personnel to safe areas. Only qualified personnel equipped with suitable protective equipment may intervene. Prevent unauthorized persons entering the zone.
Environmental precautions :	Prevent product from entering drains. Discharge into the environment must be avoided.
Methods and materials for : containment and cleaning up	Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

## SECTION 7. HANDLING AND STORAGE

Advice on protection against fire and explosion	:	Avoid formation of aerosol. Keep away from sources of ignition - No smoking. No sparking tools should be used. Take measures to prevent the build up of electrostatic charge.			
Advice on safe handling	:	Persons with a history of skin sensitization problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used. For personal protection see section 8. Avoid formation of aerosol. Do not breathe vapors or spray mist. Avoid contact with skin, eyes and clothing. Smoking, eating and drinking should be prohibited in the application area. Provide sufficient air exchange and/or exhaust in work rooms. Container may be opened only under exhaust ventilation hood. Open drum carefully as content may be under pressure. Dispose of rinse water in accordance with local and national			
Silver Fern Chemical, Inc. Safety Data Sheet Ethylene Diamine					

Page **5** of **17** 



Version	Revision Date:	US / 2	Z8 Date of last issue: 02/02/2023
2.2	03/21/2023		Date of first issue: 12/20/2012
	ions for safe storage r information on stor- ability	: P N K R E th	gulations. revent unauthorized access. o smoking. eep in a well-ventilated place. eacts with copper, aluminum, zinc and their alloys ectrical installations / working materials must comply with e technological safety standards. o decomposition if stored and applied as directed.

### SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components	CAS-No.	Value type (Form of exposure)	Control parame- ters / Permissible concentration	Basis			
Ethylenediamine	107-15-3	TWA	10 ppm	ACGIH			
		TWA	10 ppm 25 mg/m3	NIOSH REL			
		TWA	10 ppm 25 mg/m3	OSHA Z-1			
		TWA	10 ppm 25 mg/m3	OSHA P0			
Engineering measures	Ensure th	exhaust ventilation at eyewash station kstation location.	system s and safety showers	are close			
Personal protective equip	ment						
Respiratory protection	an approv Wear full			pirator with			
Hand protection	ciae cain	ago ri (annionia, g	,,.				
Material	: butyl-rubb	ber					
Break through time	: > 30 min						
Glove thickness	: >= 0.2 mr	n					
Directive	: Protective	gloves complying	with EN 374.				
Wearing time	: < 30 min						
Material	: butyl-rubb	ber					
Break through time	: > 240 min	1					
Glove thickness	: >= 0.6 mr						
	· Protoctive	gloves complying	with EN 374.				
Directive		0 100	< 240 min				
		0 100					
Directive Wearing time Material	: < 240 min : butyl-rubb	per					
Directive Wearing time	: < 240 mir	per					

#### Ingredients with workplace control parameters

Silver Fern Chemical, Inc. Safety Data Sheet **Ethylene Diamine** Page 6 of 17



Version 2.2	Revision Date: 03/21/2023	US / Z8	Date of last issue: 02/02/2023 Date of first issue: 12/20/2012
	rective earing time	: Protective : < 480 min	gloves complying with EN 374.
Re	emarks	standard	about break through time/strength of material are values! The exact break through time/strength of as to be obtained from the producer of the alove.
Skin a	rotection and body protection ne measures	: Safety gla : Protective : Avoid con When usi When usi	sses with side-shields conforming to EN166 suit tact with skin, eyes and clothing. ng do not eat or drink. ng do not smoke. ds before breaks and immediately after handling
			ct. taminated clothing before re-use.

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	:	Clear liquid
Color	:	colorless
Odor	:	ammoniacal
Odor Threshold	:	No data available
рН	:	12.8 Concentration: 25 %
Melting point/range	:	52 °F / 11 °C (1,013 hPa)
Boiling point/boiling range	:	243 °F / 117 °C (1,013 hPa)
Flash point	:	100 °F / 38 °C (1,013 hPa) Method: closed cup
Evaporation rate	:	No data available
Flammability (solid, gas)	:	Not applicable
Flammability (liquids)	:	Flammable liquid and vapor.
Upper explosion limit / Upper flammability limit	:	17 %(V)

Silver Fern Chemical, Inc. Safety Data Sheet Ethylene Diamine Page 7 of 17



Versio 2.2	n Revision Date: 03/21/2023	US	5 / Z8	Date of last issue: 02/02/2023 Date of first issue: 12/20/2012
	ower explosion limit / Lower ammability limit	:	2 %(V)	
V	apor pressure	:	17.3 hPa (79.9 °	F / 26.6 °C)
R	elative vapor density	:	2.1	
R	elative density	:	0.897 (68 °F / 20	) °C)
D	ensity	:	0.895 g/cm3 (68	°F / 20 °C)
S	olubility(ies) Water solubility	:	completely misc	ble
	Solubility in other solvents	:	Description: Ver	y soluble in ethanol and benzene.
-	artition coefficient: n- ctanol/water	:	log Pow: -1.6 (68	3 °F / 20 °C)
	utoignition temperature	:	725 - 761 °F / 38	35 - 405 °C (1,013 hPa)
D	ecomposition temperature	:	No data availabl	e
V	iscosity Viscosity, dynamic	:	1.265 mPa.s (77	′ °F / 25 °C)
	Viscosity, kinematic	:	No data availabl	e
E	xplosive properties	:	Not explosive	
С	xidizing properties	:	The substance c	or mixture is not classified as oxidizing.

### SECTION 10. STABILITY AND REACTIVITY

Reactivity Chemical stability Possibility of hazardous reac- tions	:	Stable under normal conditions. Stable under recommended storage conditions. Heating can release hazardous gases.
Conditions to avoid Incompatible materials	:	Heat, flames and sparks. Reacts with copper, aluminum, zinc and their alloys Strong acids and oxidizing agents Halogenated compounds
Hazardous decomposition products	:	Nitrogen oxides (NOx)
Thermal decomposition	:	No data available

Silver Fern Chemical, Inc. Safety Data Sheet Ethylene Diamine Page 8 of 17



Version	Revision Date:	US / Z8
2.2	03/21/2023	

Date of last issue: 02/02/2023 Date of first issue: 12/20/2012

### SECTION 11. TOXICOLOGICAL INFORMATION

### Acute toxicity

Harmful if swallowed or if inhaled. Toxic in contact with skin.

#### Components:

Ethylenediamine:	
Acute oral toxicity	: LD50 (Rat): > 300 - 2,000 mg/kg
Acute inhalation toxicity	: LC50 (Rat): > 10 - 20 mg/l Exposure time: 4 h Test atmosphere: vapor
Acute dermal toxicity	: LD50 (Rabbit): > 200 - 1,000 mg/kg
Skin corrosion/irritation Causes severe burns. <u>Components:</u>	
<b>Ethylenediamine:</b> Result	: Causes burns.
<b>Serious eye damage/eye ir</b> Causes serious eye damage	
Respiratory or skin sensiti	zation
<b>Skin sensitization</b> May cause an allergic skin re	eaction.
Respiratory sensitization May cause allergy or asthma	symptoms or breathing difficulties if inhaled.
Components:	
<b>Ethylenediamine:</b> Result	: The product is a skin sensitizer, sub-category 1B.
Result	: The product is a respiratory sensitizer, sub-category 1B.

## Germ cell mutagenicity

Not classified based on available information.

Silver Fern Chemical, Inc. Safety Data Sheet Ethylene Diamine Page 9 of 17



ersion .2	Revision Da 03/21/2023	te: US / Z8	Date of last issue: 02/02/2023 Date of first issue: 12/20/2012
<u>Com</u>	oonents:		
Ethyl	enediamine:		
Geno	toxicity in vitro	: Result:	Not mutagenic.
		Remark	s: Positive results were obtained in some in vitro tests
Geno	toxicity in vivo	: Result:	No evidence of genotoxic effects in vivo.
Carci	nogenicity		
Not cl IARC	No i		on. ct present at levels greater than or equal to 0.1% is sible or confirmed human carcinogen by IARC.
OSH		component of this prod OSHA's list of regulated	uct present at levels greater than or equal to 0.1% is d carcinogens.
NTP			ct present at levels greater than or equal to 0.1% is atticipated carcinogen by NTP.
-	oductive toxic assified based	<b>ity</b> on available informati	on.
	-single expos	<b>ure</b> on available informati	on.
	-repeated exp assified based	osure on available informati	on.
-	ation toxicity assified based	on available informati	on.
Furth	er information	1	
<u>Produ</u> Rema		: Solvent	s may degrease the skin.
ECTION	12. ECOLOGI	CAL INFORMATION	
Ecoto	oxicity		
<u>Com</u>	oonents:		
Ethyl	enediamine:		

Toxicity to fish

: LC50 (Poecilia reticulata (guppy)): > 100 mg/l Exposure time: 96 h

Silver Fern Chemical, Inc. Safety Data Sheet Ethylene Diamine Page 10 of 17



sion	Revision Date: 03/21/2023	US	; / Z8	Date of last issue: 02/02/2023 Date of first issue: 12/20/2012
	y to daphnia and other c invertebrates	:	EC50 (Daphnia n Exposure time: 4	nagna (Water flea)): > 10 - 100 mg/l 8 h
Toxicit plants	y to algae/aquatic	:	EC50 (Pseudokir mg/l Exposure time: 7	chneriella subcapitata (green algae)): > 10 2 h
	y to daphnia and other c invertebrates (Chron- sity)	:	NOEC (Daphnia Exposure time: 2	magna (Water flea)): > 0.1 - 1 mg/l 1 d
Ecoto	xicology Assessment			
Acute	aquatic toxicity	:	Harmful to aquati	c life.
Chroni	c aquatic toxicity	:	Harmful to aquati	c life with long lasting effects.
Persis	stence and degradabili	ity		
Produ	ct:			
Biodeg	gradability	:	Result: Readily b	iodegradable.
Bioche mand	emical Oxygen De- (BOD)	:	Remarks: No dat	a available
<u>Comp</u>	onents:			
Ethyle	enediamine:			
-	gradability	:	Result: Readily b Remarks: >60% 301D).	iodegradable. 3OD, 28-days, Closed Bottle Test (OECD
Bioche mand	emical Oxygen De- (BOD)	:	Remarks: No dat	a available
Bioace	cumulative potential			
<u>Produ</u>	ct:			
	cumulation	:	Remarks: Not ex	pected considering the low log Pow value.
<u>Comp</u>	onents:			
Ethyle	enediamine:			
Bioaco	cumulation	:	Remarks: Not ex	pected considering the low log Pow value.
	on coefficient: n- I/water	:	log Pow: -1.6 (68	°F / 20 °C)
Mobili	ty in soil			
<u>Produ</u>	ot.			

Silver Fern Chemical, Inc. Safety Data Sheet Ethylene Diamine Page 11 of 17



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## Safety Data Sheet Silver Fern Chemical, Inc. Ethylene Diamine

Vers 2.2	sion	Revision Date: 03/21/2023	US	5 / Z8	Date of last issue: 02/02/2023 Date of first issue: 12/20/2012
	Mobility		:	Remarks: Adsorpt	ion to solid soil phase is possible.
	<u>Compo</u>	onents:			
	Ethylenediamine: Mobility		:		ion to solid soil phase is possible. amination is unlikely. not expected.
	Other a	dverse effects			
	Produc	<u>t:</u>			
	Ozone-	Depletion Potential	:	tection of Stratosp Substances Remarks: This pro tured with a Class	R Protection of Environment; Part 82 Pro- heric Ozone - CAA Section 602 Class I duct neither contains, nor was manufac- I or Class II ODS as defined by the U.S. ion 602 (40 CFR 82, Subpt. A, App.A + B).
	Additior mation	nal ecological infor-	:	An environmental unprofessional ha	hazard cannot be excluded in the event of ndling or disposal.
	<u>Compo</u>	nents:			
	-	nediamine: of PBT and vPvB ment	:	Bioaccumulation,	not considered to be a PBT (Persistent, Toxic) This substance is not considered to sistent nor very Bioaccumulating)

### SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods	
Waste from residues	<ul> <li>The product should not be allowed to enter drains, water courses or the soil.</li> <li>Do not contaminate ponds, waterways or ditches with chemical or used container.</li> </ul>
Contaminated packaging	Dispose of contents/container in accordance with local regulation. Empty remaining contents. Dispose of as unused product.
	Do not burn, or use a cutting torch on, the empty drum.

### SECTION 14. TRANSPORT INFORMATION

## International Regulations

Silver Fern Chemical, Inc. Safety Data Sheet Ethylene Diamine Page 12 of 17



Version 2.2	Revision Date: 03/21/2023	US	S / Z8	Date of last issue: 02/02/2023 Date of first issue: 12/20/2012
Prop Class Subs	iumber er shipping name s idiary risk ing group	: : : : : : : : : : : : : : : : : : : :	UN 1604 ETHYLENEDIAN 8 3 II 8 (3)	line
UN/II Prop Class Subs Pack Labe Pack aircra Pack	idiary risk ing group Ils ing instruction (cargo	: : : : : : : : : : : : : : : : : : : :	UN 1604 Ethylenediamine 8 3 II Corrosives, Flam 855 851	mable Liquids
UN r Prop Class Subs Pack Labe EmS Marin	sidiary risk ling group lls Code ne pollutant	:	UN 1604 ETHYLENEDIAW 8 3 II 8 (3) F-E, S-C no	
	sport in bulk according applicable for product as	-		OL 73/78 and the IBC Code
Dom	estic regulation			
	<b>FR</b> D/NA number	:	UN 1604	

UN/ID/NA number	: UI	N 1604
Proper shipping name	: Et	hylenediamine
Class	: 8	
Subsidiary risk	: 3	
Packing group	: 11	
Labels	: C0	ORROSIVE, FLAMMABLE LIQUID
ERG Code	: 13	32
Marine pollutant	: no	)
Reportable Quantity	er	nis product contains the following substance(s) which are nvironmentally hazardous per 49 CFR 172.101, Appendix A:

(Ethylenediamine)

Silver Fern Chemical, Inc. Safety Data Sheet Ethylene Diamine Page 13 of 17



Version	Revision Date:	US / Z8	Date of last issue: 02/02/2023
2.2	03/21/2023		Date of first issue: 12/20/2012

#### Special precautions for user

The transport classification(s) provided herein are for informational purposes only. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

### **SECTION 15. REGULATORY INFORMATION**

#### **CERCLA Reportable Quantity**

Components	CAS-No.	Component RQ	
		(lbs)	(lbs)
Ethylenediamine	107-15-3	5000	5000

#### SARA 304 Extremely Hazardous Substances Reportable Quantity

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
Ethylenediamine	107-15-3	5000	5000

#### SARA 302 Extremely Hazardous Substances Threshold Planning Quantity

Components	CAS-No.	Component TPQ (lbs)
Ethylenediamine	107-15-3	10000
SARA 311/312 Hazards	Acute toxicity Respiratory o Skin corrosic	gases, aerosols, liquids, or solids) / (any route of exposure) or skin sensitization on or irritation damage or eye irritation
SARA 313	known CAS	does not contain any chemical components with numbers that exceed the threshold (De Minimis) els established by SARA Title III, Section 313.

#### **Clean Air Act**

This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

The following chemical(s) are listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F):

Ethylenediamine 107-15-3 >= 90 - <= 100 % The following chemical(s) are listed under the U.S. Clean Air Act Section 111 SOCMI Intermediate or Final VOC's (40 CFR 60.489): 107-15-3

Ethylenediamine

>= 90 - <= 100 %

#### **Clean Water Act**

The following Hazardous Substances are listed under the U.S. CleanWater Act, Section 311, Table 116.4A:

Silver Fern Chemical, Inc. Safety Data Sheet **Ethylene Diamine** Page 14 of 17



Version	Revision Date:	US / Z8	Date of last issue: 02/02/2023
2.2	03/21/2023		Date of first issue: 12/20/2012

The following Hazardous Chemicals are listed under the U.S. CleanWater Act, Section 311, Table 117.3:

Ethylenediamine 107-15-3 >= 90 - <= 100 % This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

This product does not contain any priority pollutants related to the U.S. Clean Water Act

#### **US State Regulations**

Massachusetts Right To Know	
Ethylenediamine	107-15-3
Pennsylvania Right To Know	
Ethylenediamine	107-15-3

#### Maine Chemicals of High Concern

This product does not contain any chemicals that are listed as Maine Chemicals of High Concern.

### California Prop. 65

This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

California List of Hazardous Ethylenediamine	s Sı	Ibstances 107-15-3
	su	re Limits for Chemical Contaminants 107-15-3
	luci	are reported in the following inventories:
TCSI	:	On the inventory, or in compliance with the inventory
TSCA	:	All substances listed as active on the TSCA inventory
AIIC	:	On the inventory, or in compliance with the inventory
DSL	:	All components of this product are on the Canadian DSL
ENCS	:	On the inventory, or in compliance with the inventory
ISHL	:	On the inventory, or in compliance with the inventory
KECI	:	On the inventory, or in compliance with the inventory
PICCS	:	On the inventory, or in compliance with the inventory
IECSC	:	On the inventory, or in compliance with the inventory
NZIoC	:	On the inventory, or in compliance with the inventory
TECI	:	On the inventory, or in compliance with the inventory
	:	Silver Fern Chemical, Inc. Safety Data Sheet

Safety Data Sheet Ethylene Diamine Page 15 of 17



Version	Revision Date:	US / Z8
2.2	03/21/2023	

Date of last issue: 02/02/2023 Date of first issue: 12/20/2012

3

2

1

### **TSCA** list

No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

#### **SECTION 16. OTHER INFORMATION**

## **Further information** NFPA 704: HMIS® IV: Flammability HEALTH **FLAMMABILITY** Health Instability 3 **PHYSICAL HAZARD** HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. The "\*" represents Special hazard a chronic hazard, while the "/" represents the absence of a chronic hazard.

### Full text of other abbreviations

ACGIH NIOSH REL OSHA P0	:	USA. ACGIH Threshold Limit Values (TLV) USA. NIOSH Recommended Exposure Limits USA. Table Z-1-A Limits for Air Contaminants (1989 vacated values)
OSHA Z-1	:	USA. Occupational Exposure Limits (OSHA) - Table Z-1 Lim- its for Air Contaminants
ACGIH / TWA	:	8-hour, time-weighted average
NIOSH REL / TWA	:	Time-weighted average concentration for up to a 10-hour workday during a 40-hour workweek
OSHA P0 / TWA	:	8-hour time weighted average
OSHA Z-1 / TWA	:	8-hour time weighted average

AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the

> Silver Fern Chemical, Inc. Safety Data Sheet **Ethylene Diamine** Page 16 of 17



Version	Revision Date:	US / Z8	Date of last issue: 02/02/2023
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German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC -International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals: OECD - Organization for Economic Co-operation and Development: OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

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US / Z8

Silver Fern Chemical, Inc. Safety Data Sheet Ethylene Diamine Page 17 of 17