



Silver Fern Chemical, Inc.  
Safety Data Sheet  
Fernamine-M

Revision Date: 05/30/2025

## Section 1. Identification

### Product identifier

**Product Identity**

Fernamine-M

**Other means of identification**

M-Amine-1

### Relevant identified uses of the substance or mixture and uses advised against

Proprietary Blend

### Details of the supplier of the safety data sheet

**Company Name**

Silver Fern Chemical, Inc.  
121 W. De La Guerra Street, Suite B  
Santa Barbara, CA 93101 USA  
Customer Service: 1-866-282-3384 /  
info@silverfernchemical.com  
Website - www.silverfernchemical.com

**Emergency**

**24 hour Emergency**

**Telephone No.**

Emergency telephone number  
Infotrac: 1-800-535-5053; Outside USA & Canada +1-352-  
323-3500

**Customer Service:**

## Section 2. Hazard(s) identification

### Classification of the substance or mixture under OSHA's Hazard Communication Standard (1910.1200) revised 2024 (GHS revision 7)

Acute toxicity(oral), category 4;H302  
Acute toxicity(dermal), category 4;H312  
Acute toxicity(inhalation), category 4;H332  
Skin corrosion/irritation category 1;H314

Harmful if swallowed.  
Harmful in contact with skin.  
Harmful if inhaled.  
Causes severe skin burns  
and eye damage.



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Serious eye damage / eye irritation, category 1;H318  
Specific target organ toxicity, Single exposure category 3;H335  
Aquatic toxicity (chronic), category 3;H412

Causes serious eye damage.  
May cause respiratory irritation.  
Harmful to aquatic life with long lasting effects.

**Label elements**



**Danger**

H302 Harmful if swallowed.  
H312 Harmful in contact with skin.  
H314 Causes severe skin burns and eye damage.  
H332 Harmful if inhaled.  
H335 May cause respiratory irritation.  
H412 Harmful to aquatic life with long lasting effects.

**[Prevention]**

P233 Keep container tightly closed.  
P260 Do not breathe dust, fume, mist, vapors or spray.  
P264 Wash thoroughly after handling.  
P270 Do not eat, drink or smoke when using this product.  
P271 Use only outdoors or in a well-ventilated area.  
P273 Avoid release to the environment.  
P280 Wear protective gloves, protective clothing, eye protection, face protection.

**[Response]**

P301+312 IF SWALLOWED: Call a POISON CENTER, doctor or physician if you feel unwell.  
P302+352 IF ON SKIN: Wash with plenty of soap and water.  
P303+361+353 IF ON SKIN (or hair): Remove, take off immediately all contaminated clothing. Rinse skin with water, shower.  
P304+340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
P305+351+338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P310 Immediately call a POISON CENTER, doctor or physician.  
P312 Call a POISON CENTER, doctor or physician if you feel unwell.  
P301+330+331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.  
P362+364 Take off contaminated clothing and wash it before reuse.



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P363 Wash contaminated clothing before reuse.

**[Storage]**

P403+233 Store in a well ventilated place. Keep container tightly closed.

P405 Store locked up.

**[Disposal]**

P501 Dispose of contents or container in accordance with local and national regulations.

**Other hazards**

This product contains no PBT/vPvB/vPvM chemicals.

This product contains no endocrine disrupting chemicals.

Does not contain component(s) that meet a 'definition' of per & poly fluoroalkyl substance (PFAS) per US or Canadian regulations.

**Section 3. Composition/information on ingredients**

This product contains the following substances that present a hazard within the meaning of the OSHA's Hazard Communication Standard (1910.1200) revised 2024 (GHS revision 7).

Ingredient/Chemical Designations	Weight %	GHS Classification	Notes
Ethanolamine CAS Number: 141-43-5 Synonyms: No available information	80 - 100	Acute toxicity(inhalation), category 4;H332 Acute toxicity(dermal), category 4;H312 Acute toxicity(oral), category 4;H302 Skin corrosion/irritation category 1B;H314 Specific target organ toxicity, Single exposure category 3;H335 > 5% Aquatic toxicity (chronic), category 3;H412	No data available
Proprietary Blend CAS Number: Proprietary Synonyms: No available information	10 - 30	Acute toxicity(oral), category 4;H302 Skin corrosion/irritation category 1;H314 Acute toxicity(dermal), category 4;H312 Acute toxicity(inhalation), category 4;H332 Specific target organ toxicity, Single exposure category 3;H335	No data available

The actual concentration or concentration range is withheld as a trade secret.

\*PBT/vPvB - PBT, vPvM or vPvB-substance.

The full texts of the phrases are shown in Section 16.



## Section 4. First aid measures

### Description of first aid measures

- General** In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.
- Inhalation** Remove to fresh air, keep patient warm and at rest. If breathing is irregular or stopped, give artificial respiration. If unconscious, place in the recovery position and obtain immediate medical attention. Give nothing by mouth.
- Eyes** Rinse with plenty of clean water for at least 15 minutes, holding the eyelids apart and seek medical attention.
- Skin** Remove contaminated clothing. Wash skin thoroughly with soap and water or use a recognized skin cleanser.
- Ingestion** If swallowed obtain immediate medical attention. Keep at rest. Do NOT induce vomiting.

### Most important symptoms and effects, both acute and delayed

- Overview** No specific symptom data available.  
No chronic toxicity or long term toxicity information available. Treat symptomatically. See section 2 for further details.
- Inhalation** Harmful if inhaled. May cause respiratory irritation.
- Eyes** Causes serious eye damage.
- Skin** Harmful in contact with skin. Causes severe skin burns and eye damage.
- Ingestion** Harmful if swallowed.

## Section 5. Fire-fighting measures

### Extinguishing media

Recommended extinguishing media; alcohol resistant foam, CO<sub>2</sub>, powder, water spray.  
Unsuitable extinguishing media: Do not use; water jet.



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**Special hazards arising from the substance or mixture**

Hazardous decomposition: No hazardous decomposition data available.

Keep container tightly closed.

Do not breathe dust, fume, mist, vapors or spray.

**Advice for fire-fighters**

As with all fires, wear positive pressure, self-contained breathing apparatus, (SCBA) with a full face piece and protective clothing. Persons without respiratory protection should leave area. Wear SCBA during clean-up immediately after fire. No smoking.

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<p><b>Section 6. Accidental release measures</b></p>
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**Personal precautions, protective equipment and emergency procedures**

Put on appropriate personal protective equipment (see section 8).

Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

**Environmental precautions**

Do not allow spills to enter drains or waterways.

**Methods and material for containment and cleaning up**

Ventilate the area and avoid breathing vapors. Take the personal protective measures listed in section 8.

Contain and absorb spillage with non-combustible materials e.g. sand, earth, and vermiculite. Place in closed containers outside buildings and dispose of according to the Waste Regulations.



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## Section 7. Handling and storage

### Precautions for safe handling

Handle containers carefully to prevent damage and spillage.  
See section 2 for further details. - [Prevention]

### Conditions for safe storage, including any incompatibilities

Incompatible materials: Any acidic material, ammonia, urea, oxidizable materials and metals such as nickel, copper, tin, aluminum and iron.  
See section 2 for further details. - [Storage]

### Specific end use(s)

No available information

## Section 8. Exposure controls / personal protection

### Control parameters

#### Exposure Limits

CAS No.	Ingredient	Source	Value
141-43-5	Ethanolamine	OSHA	3 ppm, 6 mg/m <sup>3</sup>
		ACGIH	3 ppm 6 ppm
		NIOSH	TWA 3 ppm (8 mg/m <sup>3</sup> ) STEL: 6 ppm (15 mg/m <sup>3</sup> )
Proprietary	Proprietary Blend	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit

### Exposure controls

**Respiratory** Use NIOSH/MSHA approved respirator, following manufacturer's recommendations when concentrations exceed permissible exposure limits.

**Eyes** Wear safety glasses with side shields to protect the eyes. An eye wash station is suggested as a good workplace practice.



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<b>Skin</b>	Chemical resistant clothing such as coveralls/apron and boots should be worn. Chemical impervious gloves required.
<b>Engineering Controls</b>	Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and any vapor below occupational exposure limits suitable respiratory protection must be worn.
<b>Other Work Practices</b>	Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

See section 2 for further details.

## Section 9. Physical and chemical properties

### Information on basic physical and chemical properties

<b>Physical State</b>	Liquid
<b>Color</b>	Clear pale yellow
<b>Odor</b>	Amine-like
<b>Melting point / freezing point</b>	-13.1°C (8.4°F)
<b>Initial boiling point and boiling range</b>	100°C (212° F) to 170° C (338° F)
<b>Flammability (solid, gas)</b>	Not Applicable
<b>Upper/lower flammability or explosive limits</b>	<b>Lower Explosive Limit:</b> No available information <b>Upper Explosive Limit:</b> No available information
<b>Flash Point</b>	104°C (219° F) Tag Closed-Cup (ASTM D56)
<b>Auto-ignition temperature</b>	425°C (797°F)
<b>Decomposition temperature</b>	No available information
<b>pH</b>	>12
<b>Viscosity (cSt)</b>	#1: 23.8 6 mPa.s a t 20°C (68° F)
<b>Solubility in Water</b>	Completely Soluble in water.
<b>Partition coefficient n-octanol/water (Log Kow)</b>	No available information
<b>Vapor pressure (Pa)</b>	< 0.5 mbar
<b>Relative Density</b>	1.03 at 20 °C (68° F)
<b>Vapor Density</b>	Not yet Determined



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<b>Evaporation rate (Ether = 1)</b>	No available information
<b>VOC Content</b>	None
<b>Oxidising properties</b>	No available information
<b>Explosive properties</b>	This product is not flammable and will not support combustion.
<b>Density</b>	8.57 at 20 °C (68° F)
<b>Thermal decomposition</b>	This product will not undergo self-decomposition.

**Other information**

No other relevant information.

<b>Section 10. Stability and reactivity</b>
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**Reactivity**

Hazardous Polymerization will not occur.

**Chemical stability**

Stable under normal circumstances.

**Possibility of hazardous reactions**

No available information

**Conditions to avoid**

Avoid high temperatures and contact with incompatible material

**Incompatible materials**

Any acidic material, ammonia, urea, oxidizable materials and metals such as nickel, copper, tin, aluminum and iron.

**Hazardous decomposition products**

No hazardous decomposition data available.





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Section 11. Toxicological information

Acute toxicity

Note: When no route specific LD50 data is available for an acute toxin, the converted acute toxicity point estimate was used in the calculation of the product's ATE (Acute Toxicity Estimate).

Ingredient	Oral LD50, mg/kg	Skin LD50, mg/kg	Inhalation Vapor LC50, mg/L/4hr	Inhalation Dust/Mist LC50, mg/L/4hr	Inhalation Gas LC50, ppm
Ethanolamine - (141-43-5)	1,515.00, Rat - Category: 4	2,504.00, Rabbit - Category: 5	No data available.	No data available.	No data available.
Proprietary Blend - (Proprietary)	No data available.	No data available.	No data available.	No data available.	No data available.

Carcinogen Data

CAS No.	Ingredient	Source	Value
141-43-5	Ethanolamine	OSHA	Regulated Carcinogen: No;
		NTP	Known: No; Suspected: No;
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No;
		ACGIH	No Established Limit
Proprietary	Proprietary Blend	OSHA	Regulated Carcinogen: No;
		NTP	Known: No; Suspected: No;
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No;
		ACGIH	No Established Limit

Classification	Category	Hazard Description
Acute toxicity (oral)	4	Harmful if swallowed.
Acute toxicity (dermal)	4	Harmful in contact with skin.
Acute toxicity (inhalation)	4	Harmful if inhaled.
Skin corrosion/irritation	1	Causes severe skin burns and eye damage.
Serious eye damage/irritation	1	Causes serious eye damage.
Respiratory sensitization	---	Not Applicable
Skin sensitization	---	Not Applicable
Germ cell mutagenicity	---	Not Applicable



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Carcinogenicity	---	Not Applicable
Reproductive toxicity	---	Not Applicable
STOT-single exposure	---	Not Applicable
STOT-single exposure	3	May cause respiratory irritation.
STOT-repeated exposure	---	Not Applicable
Aspiration hazard	---	Not Applicable

**Possible routes of entry:**No available information

**Symptoms and effects, both acute and delayed:**

No specific symptom data available.

No chronic toxicity or long term toxicity information available. Treat symptomatically.

**Eyes** Causes serious eye damage.

**Skin** Harmful in contact with skin. Causes severe skin burns and eye damage.

**Ingestion** Harmful if swallowed.

**Section 12. Ecological information**

**Toxicity**

Harmful to aquatic life with long lasting effects.

No additional information provided for this product. See Section 3 for chemical specific data.

**Aquatic Ecotoxicity**

Ingredient	96 hr LC50 fish, mg/L	48 hr EC50 crustacea, mg/L	ErC50 algae, mg/L
Ethanolamine - (141-43-5)	349.00, Cyprinus carpio	65.00, Daphnia magna	2.80, Pseudokirchneriella subcapitata
Proprietary Blend - (Proprietary)	No data available.	No data available.	No data available.

**Persistence and degradability**

There is no data available on the preparation itself.

**Bioaccumulative potential**

No available information



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**Mobility in soil**

No available information

**Results of PBT and vPvB assessment**

This product contains no PBT/vPvB/vPvM chemicals.

**Other adverse effects**

No available information

**Section 13. Disposal considerations**

**Waste treatment methods**

Observe all federal, provincial and local regulations when disposing of this substance.

**Section 14. Transport information**

Not regulated for packages under 5L (1.3 gallons) or 5.0 kg (11 lbs).

	<b>DOT (Domestic Surface Transportation)</b>	<b>IMO / IMDG (Ocean Transportation)</b>	<b>ICAO/IATA</b>
<b>UN number</b>	UN1760	UN1760	UN1760
<b>UN proper shipping name</b>	UN1760, Corrosive liquids, n.o.s. (Ethanolamine), 8, III	Corrosive liquids, n.o.s. (Ethanolamine)	Corrosive liquids, n.o.s. (Ethanolamine)
<b>Transport hazard class(es)</b>	<b>Class:8</b> <b>Sub Class:</b> Not Applicable	<b>Class:8</b> <b>Sub Class:</b> Not Applicable	<b>Class:8</b> <b>Sub Class:</b> Not Applicable
<b>Packing group</b>	III	III	III

**Environmental hazards**

IMDG Marine Pollutant: No;

**Special precautions for user**

No available information



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## Section 15. Regulatory information

### Regulatory Overview

The regulatory data in Section 15 is not intended to be all-inclusive, only selected regulations are represented.

Classification of the substance or mixture under OSHA's Hazard Communication Standard (1910.1200) revised 2024 (GHS revision 7)

### Toxic Substance Control Act (TSCA)

CAS Number	Ingredient	Toxic Substance Control Act (TSCA)	Comments	Status
0000141-43-5	Ethanolamine	Yes		ACTIVE
Proprietary	Proprietary Blend	No		

The following flags are used:

- Active - indicates commercial status designation of active
- E - indicates a substance that is the subject of a Section 5(e) Consent Order under TSCA.
- F - indicates a substance that is the subject of a Section 5(f) Rule under TSCA.
- N - indicates a polymeric substance containing no free-radical initiator in its Inventory name but is considered to cover the designated polymer made with any free-radical initiator regardless of the amount used.
- P - indicates a commenced Premanufacture Notice (PMN) substance.
- R - indicates a substance that is the subject of a Section 6 risk management rule under TSCA.
- S - indicates a substance that is identified in a final Significant New Uses Rule.
- SP - indicates a substance that is identified in a proposed Significant New Uses Rule.
- T - indicates a substance that is the subject of a final Section 4 test rule under TSCA.
- UVCB Chemical Substances of Unknown or Variable Composition, Complex Reaction Products and Biological Materials
- XU - indicates a substance exempt from reporting under the Chemical Data Reporting Rule, (40 CFR 711).
- Y1 - indicates a polymer that has a number-average molecular weight greater than 1,000 and that was exempt under the 1984 polymer exemption rule.
- Y2 - indicates a polymer that is a polyester and that was exempt under the 1984 polymer exemption rule.

### EPCRA 302 Extremely Hazardous:

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.



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**EPCRA 313 Toxic Chemicals:**

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

**Proposition 65 - Carcinogens (>0.0%):**

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

**Proposition 65 - Developmental Toxins (>0.0%):**

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

**Proposition 65 - Female Repro Toxins (>0.0%):**

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

**Proposition 65 - Male Repro Toxins (>0.0%):**

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

**Proposition 65 Label Warning:**

This product contains no chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

**Mass RTK Substances (>1%) :**

Ethanolamine

**New Jersey RTK Substances (>1%):**

Ethanolamine

**Pennsylvania RTK Substances (>1%):**

Ethanolamine



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**OSHA Process Safety Management Standard Highly Hazardous Chemicals, Toxics and Reactives:**

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

**US EPA List of Regulated Substances under the Risk Management Plan (RMP) Program:**

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

**US EPA Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) under the Minimum Risk Exemption:**

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

**U.S. - DEA List II or Essential Chemicals:**

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

**U.S. - DEA - Exempt Chemical Mixtures - List 1 and 2:**

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

**US DHS Chemical Facility Anti-Terrorism Standards (CFATS):**

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

**EPCRA 311/312 Chemicals and RQs:**

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.



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**Section 16. Other information**

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**DISCLAIMER OF RESPONSIBILITY**

The information on this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. Some information presented and conclusions drawn herein are from sources other than direct test data on the substance itself. The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume damage or expense arising out of or in any way responsibility and expressly disclaim liability for loss, connected with handling, storage, use, or disposal of this product. If the product is used as a component in another product, this SDS information may not be applicable.

The full text of the phrases appearing in section 3 is:

H302 Harmful if swallowed.

H312 Harmful in contact with skin.

H314 Causes severe skin burns and eye damage.

H332 Harmful if inhaled.

H335 May cause respiratory irritation.

H412 Harmful to aquatic life with long lasting effects.

**End of Document**