





Silver Fern Chemical, Inc.  
Safety Data Sheet  
Oleyl Amine Distilled

Revision Date: 07/01/2024

Specific target organ toxicity,  
repeated exposure category  
2;H373

Aspiration hazard, category  
1;H304

Aquatic toxicity (acute), category  
1;H400

Aquatic toxicity (chronic),  
category 1;H410

May cause damage to organs through prolonged or  
repeated exposure. Specific Target Organs: ( gastro-  
intestinal tract, liver, immune system.)

May be fatal if swallowed and enters airways.

Very toxic to aquatic life.

Very toxic to aquatic life with long lasting effects.

**Label elements**



**Danger**

H302 Harmful if swallowed.

H304 May be fatal if swallowed and enters airways.

H314 Causes severe skin burns and eye damage.

H335 May cause respiratory irritation.

H373 May cause damage to organs through prolonged or repeated exposure.

H400 Very toxic to aquatic life.

H410 Very toxic 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+310 IF SWALLOWED: Immediately call a POISON CENTER, doctor or physician.

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.  
 P314 Get Medical advice or attention if you feel unwell.  
 P301+330+331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.  
 P363 Wash contaminated clothing before reuse.  
 P391 Collect spillage.

**[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 chemicals.  
 This product contains no endocrine disrupting chemicals.

**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
Octadecen-1-amine, (z)- CAS Number: 112-90-3 Synonyms: Octadecen-1-amine, (z)-	>= 95 - < 99	Acute toxicity(oral), category 4;H302 Aspiration hazard, category 1;H304 Specific target organ toxicity, Specific exposure category 3;H335 Specific target organ toxicity, repeated exposure category 2;H373 Skin corrosion/irritation category 1B;H314 Aquatic toxicity (acute), category 1;H400 Aquatic toxicity (chronic), category 1;H410	No data available
9-octadecenitrile, (z)- CAS Number: 112-91-4 Synonyms: Octadecenitrile, (9z)-	>= 0.5 - < 1	Skin corrosion/irritation category 2;H315 Aquatic toxicity (acute), category 1;H400 Aquatic toxicity (chronic), category 1;H410	No data available

The actual concentration or concentration range is withheld as a trade secret.  
 \*PBT/vPvB - PBT-substance 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 accidentally swallowed obtain immediate medical attention. Keep at rest. Do NOT induce vomiting.

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

**Overview** Treat symptomatically. Exposure to solvent vapor concentrations from the component solvents in excess of the stated occupational exposure limits may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms include headache, nausea, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness.

Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in dryness, irritation and possible non-allergic contact dermatitis. Solvents may also be absorbed through the skin. Splashes of liquid in the eyes may cause irritation and soreness with possible reversible damage. See section 2 for further details.

- Inhalation** May cause respiratory irritation. May be fatal if swallowed and enters airways.
- Eyes** Causes serious eye damage.
- 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.

### Special hazards arising from the substance or mixture

Not flammable. However, it is combustible following the evaporation of water, releasing a dust which is basic. Highly irritating vapors are released.  
Harmful or toxic vapors are released.  
Do not use a solid water stream as it may scatter and spread fire.  
Do not allow run-off from fire-fighting to enter drains or water courses.

### Advice for fire-fighters

Special protective equipment for firefighters: Self-contained breathing apparatus (EN 133)

Personal protective equipment comprising: suitable protective gloves, safety goggles and protective clothing

Specific firefighting methods: Contain the extinguishing fluids by bunding (the product is hazardous for the environment). Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Further information: In the event of fire and/or explosion do not breathe fumes.  
Standard procedure for chemical fires. Use a water spray to cool fully closed containers.

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## Section 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

Avoid contact with the skin and the eyes.  
Use personal protective equipment. Ensure adequate ventilation.  
For further information refer to section 8 "Exposure controls/personal protection".  
If spillage occurs on the public highway, indicate the danger and notify the authorities (police, fire brigade).

### 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.

## Section 7. Handling and storage

### Precautions for safe handling

Technical measures: Vapor extraction at source

Advice on safe handling and usage: Provide adequate ventilation. Avoid the formation or spread of mists in the atmosphere. Do NOT handle without gloves. Do not mix with incompatible materials (See list section 10). Handle in accordance with good industrial hygiene and safety practice.

### Conditions for safe storage, including any incompatibilities

Recommended: Keep in a dry, cool and well-ventilated place. Store in original container. Keep tightly closed.

To be avoided: Store away from heat.

Storage stability  
Storage temperature : 4 - 49 °C

### Specific end use(s)

No available information

## Section 8. Exposure controls / personal protection

### Control parameters



### Exposure

CAS No.	Ingredient	Source	Value
112-90-3	Octadecen-1-amine, (z)-	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit
112-91-4	9-octadecenenitrile, (z)-	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit

#### Exposure controls

- Respiratory** If workers are exposed to concentrations above the exposure limit they must use the appropriate, certified respirators.
- Eyes** Wear safety glasses with side shields to protect the eyes. An eye wash station is suggested as a good workplace practice.
- Skin** Avoid skin contact. Wear PVC or rubber gloves to keep skin contact to a minimum. Refer to the manufacturer's recommendations regarding the suitability of any gloves used.
- Engineering Controls** 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.
- Other Work Practices** 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>	Colorless to pale yellow
<b>Odor</b>	Ammoniacal
<b>Melting point / freezing point</b>	10 - 20 °C
<b>Initial boiling point and boiling range</b>	250 - 350 °C ( 1,013.25 hPa)
<b>Flammability (solid, gas)</b>	No available information



<b>Upper/lower flammability or explosive limits</b>	<b>Lower Explosive Limit:</b> No available information
<b>Flash Point</b>	<b>Upper Explosive Limit:</b> No available information
<b>Auto-ignition temperature</b>	150 °C closed cup Method: A9
<b>Decomposition temperature</b>	265 °C
<b>pH</b>	No available information
<b>Viscosity (cSt)</b>	Not applicable insoluble product
	Viscosity, dynamic: 5,000 - 20,000 mPa.s (30 °C) estimated
	Viscosity, kinematic: 6.2 - 25.3 mm <sup>2</sup> /s
<b>Solubility in Water</b>	Water solubility: (25 °C) insoluble
	Solubility in other solvents:
	Ethanol: soluble Isopropanol: soluble Isopropanol: soluble
<b>Partition coefficient n-octanol/water (Log Kow)</b>	log POW: 7.5 (20 °C) Estimated
<b>Vapor pressure (Pa)</b>	< 1 hPa (20 °C) estimated
<b>Relative Density</b>	0.8 g/cm <sup>3</sup> (25 °C) Method: DIN 51757 Relative density: 0.8 (25 °C) 0.8 (25 °C)
<b>Vapor Density</b>	No available information
<b>Evaporation rate (Ether = 1)</b>	No available information
<b>Oxidising properties</b>	Not considered as oxidizing, Structure-activity relationship (SAR)
<b>Explosive properties</b>	Not explosive
<b>Other information</b>	
No other relevant information.	

## Section 10. Stability and reactivity

### Reactivity

Hazardous Polymerization will not occur. Stable at normal ambient temperature and pressure.

### Chemical stability

Stable under normal circumstances. Stable under recommended storage conditions.

### Possibility of hazardous reactions

No available information

### Conditions to avoid





Excessive heat and open flame. Extremes of temperature and direct sunlight. Keep away from heat and sources of ignition.

**Incompatible materials**

Strong oxidizing agents and acids.

**Hazardous decomposition products**

High temperatures and fires may produce such toxic substances as carbon monoxide and carbon dioxide.

**Section 11. Toxicological information**

**Acute toxicity**

Exposure to solvent vapor concentrations from the component solvents in excess of the stated occupational exposure limits may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms include headache, nausea, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness.

Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in dryness, irritation, and possible non-allergic contact dermatitis. Solvents may also be absorbed through the skin. Splashes of liquid in the eyes may cause irritation and soreness with possible reversible damage.

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
Octadecen-1-amine, (z)- - (112-90-3)	No data available.	No data available.	No data available.	No data available.	No data available.
9-octadecenenitrile, (z)- - (112-91-4)	No data available.	No data available.	No data available.	No data available.	No data available.

**Carcinogen Data**

CAS No.	Ingredient	Source	Value
112-90-3	Octadecen-1-amine, (z)-	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



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CAS No.	Ingredient	Source	Value
112-91-4	9-octadecenenitrile, (z)-	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)	---	Not Applicable
Acute toxicity (inhalation)	---	Not Applicable
Skin corrosion/irritation	1B	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
Carcinogenicity	---	Not Applicable
Reproductive toxicity	---	Not Applicable
STOT-single exposure	3	May cause respiratory irritation.
STOT-single exposure	---	Not Applicable
STOT-repeated exposure	2	May cause damage to organs through prolonged or repeated exposure.
Aspiration hazard	1	May be fatal if swallowed and enters airways.

Possible routes of entry:

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

Treat symptomatically.

**Inhalation** May cause respiratory irritation. May be fatal if swallowed and enters airways.

**Eyes** Causes serious eye damage.

**Skin** Causes severe skin burns and eye damage.

**Ingestion** Harmful if swallowed.

**Section 12. Ecological information**

**Toxicity**

Very toxic to aquatic life.

Very toxic to aquatic life with long lasting effects.



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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
Octadecen-1-amine, (z)- - (112-90-3)	No data available.	No data available.	No data available.
9-octadecenenitrile, (z)- - (112-91-4)	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

**Mobility in soil**

No available information

**Results of PBT and vPvB assessment**

This product contains no PBT/vPvB 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**

	<b>DOT (Domestic Surface Transportation)</b>	<b>IMO / IMDG (Ocean Transportation)</b>	<b>ICAO/IATA</b>
<b>UN number</b>	UN2735	UN2735	UN2735
<b>UN proper shipping name</b>	UN2735, Amines, liquid, corrosive, n.o.s, or Polyamines, liquid, corrosive, n.o.s. ((Z)-octadec-9-enylamine, Oleo nitrile), 8,II	Amines, liquid, corrosive, n.o.s, or Polyamines, liquid, corrosive, n.o.s. ((Z)-octadec-9-enylamine, Oleo nitrile)	Amines, liquid, corrosive, n.o.s, or Polyamines, liquid, corrosive, n.o.s. ((Z)-octadec-9-enylamine, Oleo nitrile)



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<b>Transport hazard class(es)</b>	<b>DOT Hazard Class:</b> 8	<b>IMDG:</b> 8	<b>Air Class:</b> 8
<b>Packing group</b>	<b>Sub Class:</b> Not Applicable	<b>Sub Class:</b> Not Applicable	<b>Sub Class:</b> Not Applicable
	II	II	II

**Environmental hazards**

Marine Pollutant: Yes; ( Octadecen-1-amine, (z)- )

**Special precautions for user**

No available information

**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
0000112-91-4	9-octadecenenitrile, (z)-	Yes		ACTIVE
0000112-90-3	Octadecen-1-amine, (z)-	Yes		ACTIVE

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.

**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%) :**

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

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

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

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

**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.

<p><b>Section 16. Other information</b></p>
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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.



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H304 May be fatal if swallowed and enters airways.

H314 Causes severe skin burns and eye damage.

H315 Causes skin irritation.

H335 May cause respiratory irritation.

H373 May cause damage to organs through prolonged or repeated exposure.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

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