



**Silver Fern Chemical, Inc.**  
**Safety Data Sheet**  
**Trimethyl orthoacetate**

**Revision Date: 05/30/2025**

**Section 1. Identification**

**Product identifier**

<b>Product Identity</b>	Trimethyl orthoacetate
<b>Other means of identification</b>	1,1,1-Trimethoxyethane

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

See Technical Data Sheet.

**Details of the supplier of the safety data sheet**

<b>Company Name</b>	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
<b>Emergency</b>	
<b>24 hour Emergency</b>	Emergency telephone number
<b>Telephone No.</b>	Infotrac: 1-800-535-5053; Outside USA & Canada +1-352-323-3500
<b>Customer Service:</b>	

**Section 2. Hazard(s) identification**

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

Flammable Liquid, category 2;H225	Highly Flammable liquid and vapor.
Serious eye damage / eye irritation, category 2A;H319	Causes serious eye irritation.
Skin sensitizer category 1;H317	May cause an allergic skin reaction.



**Silver Fern Chemical, Inc.**  
**Safety Data Sheet**  
**Trimethyl orthoacetate**

**Revision Date: 05/30/2025**

**Label elements**



**Danger**

H225 Highly flammable liquid and vapor.  
H317 May cause an allergic skin reaction.  
H319 Causes serious eye irritation.

**[Prevention]**

P210 Keep away from heat, sparks, open flames, and other ignition sources - No smoking.  
P233 Keep container tightly closed.  
P235 Keep cool.  
P240 Ground, bond container and receiving equipment.  
P241 Use explosion-proof electrical, ventilating, light, equipment.  
P242 Use only non-sparking tools.  
P243 Take action to prevent static discharges.  
P261 Avoid breathing dust, fume, gas, mist, vapors, spray.  
P264 Wash thoroughly after handling.  
P272 Contaminated work clothing should not be allowed out of the workplace.  
P280 Wear protective gloves, eye protection, and face protection.

**[Response]**

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.  
P305+351+338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P333+313 If skin irritation or a rash occurs: Get medical advice or attention.  
P337+313 If eye irritation persists: Get medical advice or attention.  
P362+364 Take off contaminated clothing and wash it before reuse.  
P370+378 In case of fire: Use extinguishing media listed in section 5 of SDS for extinction.

**[Storage]**

P403+235 Store in a well ventilated place. Keep cool.

**[Disposal]**

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



Silver Fern Chemical, Inc.  
Safety Data Sheet  
Trimethyl orthoacetate

Revision Date: 05/30/2025

#### 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
1,1,1-trimethoxyethane CAS Number: 1445-45-0 Synonyms: Ethane, 1,1,1-trimethoxy-, Trimethyl orthoacetate	80 - 100	Flammable Liquid, category 2;H225 Serious eye damage / eye irritation, category 2;H319 Skin sensitizer category 1;H317	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.



**Silver Fern Chemical, Inc.**  
**Safety Data Sheet**  
**Trimethyl orthoacetate**

**Revision Date: 05/30/2025**

**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.

**Eyes** Causes serious eye irritation.

**Skin** May cause an allergic skin reaction.

<p><b>Section 5. Fire-fighting measures</b></p>
---

**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**

Hazardous decomposition: No hazardous decomposition data available.

Keep away from heat, sparks, open flames, and other ignition sources - No smoking.

Keep container tightly closed.

Keep cool.

Ground, bond container and receiving equipment.

Use explosion-proof electrical, ventilating, light, equipment.

Use only non-sparking tools.

Take action to prevent static discharges.

Avoid breathing dust, fume, gas, mist, vapors, 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.



Silver Fern Chemical, Inc.  
Safety Data Sheet  
Trimethyl orthoacetate

Revision Date: 05/30/2025

ERG Guide No.

127

## Section 6. Accidental release measures

### 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.

## 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: No available information  
See section 2 for further details. - [Storage]

### Specific end use(s)

No available information



Silver Fern Chemical, Inc.  
Safety Data Sheet  
Trimethyl orthoacetate

Revision Date: 05/30/2025

**Section 8. Exposure controls / personal protection**

**Control parameters**

**Exposure Limits**

CAS No.	Ingredient	Source	Value
1445-45-0	1,1,1-trimethoxyethane	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. Protective gloves recommended.

**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**

**Physical State**

Liquid

**Color**

Colorless

**Odor**

No available information



Silver Fern Chemical, Inc.  
Safety Data Sheet  
Trimethyl orthoacetate

Revision Date: 05/30/2025

<b>Melting point / freezing point</b>	No available information
<b>Initial boiling point and boiling range</b>	107 - 109 °C Method: lit.
<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>	13 °C (1,013 hPa) Method: closed cup GLP: yes
<b>Auto-ignition temperature</b>	240 °C 1,013 hPa Method: DIN 51794
<b>Decomposition temperature</b>	No available information
<b>pH</b>	No available information
<b>Viscosity (cSt)</b>	No available information
<b>Solubility in Water</b>	No available information
<b>Partition coefficient n-octanol/water (Log Kow)</b>	Log Kow
<b>Vapor pressure (Pa)</b>	No available information
<b>Relative Density</b>	0.944 g/mL (25 °C) Method: lit.
<b>Vapor Density</b>	No available information
<b>Evaporation rate (Ether = 1)</b>	No available information
<b>Oxidising properties</b>	No available information
<b>Explosive properties</b>	No available information
<b>Relative Density</b>	0.958 (20 °C) Method: OECD Test Guideline 109 GLP: yes
<b>Freezepoint</b>	< 0 °C Method: OECD Test Guideline 102
<b>Other information</b>	No other relevant information.

### Section 10. Stability and reactivity

#### Reactivity

Hazardous Polymerization will not occur.

#### Chemical stability

Stable under normal circumstances.

#### Possibility of hazardous reactions

No available information



Silver Fern Chemical, Inc.  
Safety Data Sheet  
Trimethyl orthoacetate

Revision Date: 05/30/2025

**Conditions to avoid**

Avoid high temperatures and contact with incompatible material

**Incompatible materials**

No available information

**Hazardous decomposition products**

No hazardous decomposition data available.

**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
1,1,1-trimethoxyethane - (1445-45-0)	No data available.	No data available.	No data available.	No data available.	No data available.

**Carcinogen Data**

CAS No.	Ingredient	Source	Value
1445-45-0	1,1,1-trimethoxyethane	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)	---	Not Applicable
Acute toxicity (dermal)	---	Not Applicable
Acute toxicity (inhalation)	---	Not Applicable
Skin corrosion/irritation	---	Not Applicable
Serious eye damage/irritation	2A	Causes serious eye irritation.
Respiratory sensitization	---	Not Applicable
Skin sensitization	1	May cause an allergic skin reaction.
Germ cell mutagenicity	---	Not Applicable
Carcinogenicity	---	Not Applicable





Silver Fern Chemical, Inc.  
Safety Data Sheet  
Trimethyl orthoacetate

Revision Date: 05/30/2025

Reproductive toxicity	---	Not Applicable
STOT-single exposure	---	Not Applicable
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 irritation.

**Skin** May cause an allergic skin reaction.

**Section 12. Ecological information**

**Toxicity**

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
1,1,1-trimethoxyethane - (1445-45-0)	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/vPvM chemicals.

**Other adverse effects**

No available information



Silver Fern Chemical, Inc.  
Safety Data Sheet  
Trimethyl orthoacetate

Revision Date: 05/30/2025

### Section 13. Disposal considerations

#### Waste treatment methods

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

### Section 14. Transport information

	DOT (Domestic Surface Transportation)	IMO / IMDG (Ocean Transportation)	ICAO/IATA
UN number	UN3272	UN3272	UN3272
UN proper shipping name	UN3272, Esters, n.o.s. (1,1,1-trimethoxyethane), 3, III	Esters, n.o.s. (1,1,1-trimethoxyethane)	Esters, n.o.s. (1,1,1-trimethoxyethane)
Transport hazard class(es)	Class:3 Sub Class:Not Applicable	Class:3 Sub Class:Not Applicable	Class:3 Sub Class:Not Applicable
Packing group	II	II	II

#### Environmental hazards

IMDG Marine Pollutant: No;

#### 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)



**Silver Fern Chemical, Inc.**  
**Safety Data Sheet**  
**Trimethyl orthoacetate**

**Revision Date: 05/30/2025**

**Toxic Substance Control Act (TSCA)**

CAS Number	Ingredient	Toxic Substance Control Act (TSCA)	Comments	Status
0001445-45-0	1,1,1-trimethoxyethane	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.

**EPCRA 302 Extremely Hazardous:**

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

**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.



Silver Fern Chemical, Inc.  
Safety Data Sheet  
Trimethyl orthoacetate

Revision Date: 05/30/2025

**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%) :**

(No Product Ingredients Listed)

**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.



**Silver Fern Chemical, Inc.**  
**Safety Data Sheet**  
**Trimethyl orthoacetate**

**Revision Date: 05/30/2025**

**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.

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

**Revision Date**

05/30/2025

**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.



**Silver Fern Chemical, Inc.**  
**Safety Data Sheet**  
**Trimethyl orthoacetate**

**Revision Date: 05/30/2025**

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

H225 Highly flammable liquid and vapor.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

**End of Document**