



# Silver Fern Chemical, Inc.

## Safety Data Sheet

### Ester Alcohol Coalescent, Fernestanol

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations  
Issue date: 5/7/2021 Revision date: 5/7/2021 Supersedes: 7/5/2020 Version: 1.0

## SECTION 1: Identification

### 1.1. Identification

Product form	: Substance
Trade name	: Ester Alcohol Coalescent, Fernestanol
Chemical name	: 2,2,4-TRIMETHYL-1,3-PENTANEDIOL MONOISOBUTYRATE
CAS-No.	: 25265-77-4
Product code	: Ester Alcohol
Formula	: C <sub>12</sub> H <sub>24</sub> O <sub>3</sub>
Synonyms	: Isobutyric acid, monoester with 2,2,4-trimethylpentane-1,3-diol / Propanoic acid, 2-methyl-, monoester with 2,2,4-trimethyl-1,3-pentanediol / Propionic acid, 2-methyl-, monoester with 2,2,4-trimethyl-1,3-pentanediol / Texanol / 2,2,4-Trimethyl-1,3-pentanediol isobutyrate / Trimethyl pentanediol monoisobutyrate / Isobutyric acid, monoester with 2,2,4-trimethyl-1,3-pentanediol / 2,2,4-Trimethyl-1,3-pentanediol monoisobutyrate / 2,2,4-Trimethyl-1,3-pentanediol mono(2-methylpropanoate) / 2,2,4-Trimethyl-1,3-pentanediol 2-methylpropanoate / 2,2,4-Trimethyl-1,3-pentanediolmono(2-methylpropanoate) / Trimethyl hydroxypentyl isobutyrate / TRIMETHYL HYDROXYPENTYL ISOBUTYRATE / trimethyl hydroxypentyl isobutyrate

### 1.2. Recommended use and restrictions on use

No additional information available

### 1.3. Supplier/Distributor

Silver Fern Chemical, Inc.  
2226 Queen Anne Avenue North  
Seattle WA 98109, USA  
Phone: 1-866-282-3384  
Info@silverfernchemical.com

### 1.4. Emergency telephone number

Emergency number	<b>24 Hour Emergency Contact</b> <b>Infotrac 1-800-535-5053 (USA &amp; Canada)</b> <b>Outside USA &amp; Canada 1-352-323-3500</b>
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## SECTION 2: Hazard(s) identification

### 2.1. Classification of the substance or mixture

#### GHS US classification

Hazardous to the aquatic environment - Acute Hazard Category 3	H402	Harmful to aquatic life
Full text of H- and EUH-statements: see section 16		

### 2.2. GHS Label elements, including precautionary statements

#### GHS US labeling

Hazard statements (GHS US)	: H402 - Harmful to aquatic life
Precautionary statements (GHS US)	: P273 - Avoid release to the environment. P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

### 2.3. Other hazards which do not result in classification

No additional information available

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#### 2.4. Unknown acute toxicity (GHS US)

Not applicable

### SECTION 3: Composition/Information on ingredients

#### 3.1. Substances

Name	Product identifier	%
2,2,4-TRIMETHYL-1,3-PENTANEDIOL MONOISOBUTYRATE (Main constituent)	CAS-No.: 25265-77-4	≥ 98.5

Full text of hazard classes, H- and EUH-statements: see section 16

#### 3.2. Mixtures

Not applicable

### SECTION 4: First-aid measures

#### 4.1. Description of first aid measures

First-aid measures general	: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation	: Allow affected person to breathe fresh air. Allow the victim to rest.
First-aid measures after skin contact	: Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.
First-aid measures after eye contact	: Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persists.
First-aid measures after ingestion	: Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

#### 4.2. Most important symptoms and effects (acute and delayed)

Potential Adverse human health effects and symptoms	: Based on available data, the classification criteria are not met.
Symptoms/effects	: Not expected to present a significant hazard under anticipated conditions of normal use.

#### 4.3. Immediate medical attention and special treatment, if necessary

No additional information available

### SECTION 5: Fire-fighting measures

#### 5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media	: Foam. Dry powder. Carbon dioxide. Water spray. Sand.
Unsuitable extinguishing media	: Do not use a heavy water stream.

#### 5.2. Specific hazards arising from the chemical

No additional information available

#### 5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions	: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.
Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection.



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#### SECTION 6: Accidental release measures

##### 6.1. Personal precautions, protective equipment and emergency procedures

###### 6.1.1. For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel.

###### 6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.  
Emergency procedures : Ventilate area.

##### 6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters. Avoid release to the environment.

##### 6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

##### 6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

#### SECTION 7: Handling and storage

##### 7.1. Precautions for safe handling

Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor.

##### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep only in the original container in a cool, well ventilated place away from : Ignition sources, Incompatible materials. Keep container closed when not in use.  
Incompatible products : Strong bases. Strong acids.  
Incompatible materials : Sources of ignition. Direct sunlight.

#### SECTION 8: Exposure controls/personal protection

##### 8.1. Control parameters

###### 2,2,4-TRIMETHYL-1,3-PENTANEDIOL MONOISOBUTYRATE (25265-77-4)

No additional information available

##### 8.2. Appropriate engineering controls

No additional information available

##### 8.3. Individual protection measures/Personal protective equipment

###### Personal protective equipment:

Avoid all unnecessary exposure.

###### Hand protection:

Wear protective gloves.

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**Eye protection:**

Chemical goggles or safety glasses

**Respiratory protection:**

Wear appropriate mask

**Other information:**

Do not eat, drink or smoke during use.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Clear, colorless liquid.
Color	: Colorless
Odor	: characteristic
Odor threshold	: No data available
pH	: No data available
Melting point	: -50 °C ; -58.0 °F
Freezing point	: No data available
Boiling point	: 255 – 260 °C ; 491 - 500 °F
Flash point	: 120 °C (open cup)
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: Non flammable.
Vapor pressure	: < 0.01 mm Hg at 20°C
Relative vapor density at 20 °C	: 7.5
Relative density	: 0.95
Molecular mass	: 216.3 g/mol
Solubility	: Water: 2 g/100ml
Partition coefficient n-octanol/water (Log Pow)	: 3.47 (at 25 °C)
Auto-ignition temperature	: 393 °C ; 739 °F
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosion limits	: 0.6 – 4.2 vol %
Explosive properties	: No data available
Oxidizing properties	: No data available

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No additional information available

### 10.2. Chemical stability

Not established.

### 10.3. Possibility of hazardous reactions

Not established.

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#### 10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

#### 10.5. Incompatible materials

Strong acids. Strong bases.

#### 10.6. Hazardous decomposition products

fume. Carbon monoxide. Carbon dioxide.

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified  
Acute toxicity (dermal) : Not classified  
Acute toxicity (inhalation) : Not classified

#### 2,2,4-TRIMETHYL-1,3-PENTANEDIOL MONOISOBUTYRATE (25265-77-4)

LD50 oral rat	3200 mg/kg
LD50 dermal rat	> 15200 mg/kg
LC50 Inhalation - Rat	> 3.5 mg/l (Exposure time: 6hr)
ATE US (oral)	3200 mg/kg body weight

Skin corrosion/irritation : Not classified  
Serious eye damage/irritation : Not classified  
Respiratory or skin sensitization : Not classified  
Germ cell mutagenicity : Not classified  
Carcinogenicity : Not classified  
Reproductive toxicity : Not classified  
STOT-single exposure : Not classified  
STOT-repeated exposure : Not classified  
Aspiration hazard : Not classified  
Viscosity, kinematic : No data available  
Potential Adverse human health effects and symptoms : Based on available data, the classification criteria are not met.  
Symptoms/effects : Not expected to present a significant hazard under anticipated conditions of normal use.

### SECTION 12: Ecological information

#### 12.1. Toxicity

Ecology - water : Harmful to aquatic life.

#### 2,2,4-TRIMETHYL-1,3-PENTANEDIOL MONOISOBUTYRATE (25265-77-4)

LC50 - Fish [1]	30 mg/l (Exposure time: 96 h - Species: Pimephales promelas)
LC50 - Fish [2]	> 95 mg/l (Exposure time: 96 h - Species: Daphnia Magna)

#### 12.2. Persistence and degradability

#### 2,2,4-TRIMETHYL-1,3-PENTANEDIOL MONOISOBUTYRATE (25265-77-4)

Persistence and degradability	Not established.
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#### 12.3. Bioaccumulative potential

##### 2,2,4-TRIMETHYL-1,3-PENTANEDIOL MONOISOBUTYRATE (25265-77-4)

Partition coefficient n-octanol/water (Log Pow)	3.47 (at 25 °C)
Bioaccumulative potential	Not established.

#### 12.4. Mobility in soil

No additional information available

#### 12.5. Other adverse effects

Other information : Avoid release to the environment.

### SECTION 13: Disposal considerations

#### 13.1. Disposal methods

Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

Ecology - waste materials : Avoid release to the environment.

### SECTION 14: Transport information

In accordance with Department of Transport / IMDG / IATA

#### 14.1. UN number

Not regulated for transport

#### 14.2. UN proper shipping name

Proper Shipping Name (DOT) : Not applicable  
 Proper Shipping Name (TDG) : Not applicable  
 Proper Shipping Name (IMDG) : Not applicable  
 Proper Shipping Name (IATA) : Not applicable

#### 14.3. Transport hazard class(es)

**DOT**  
 Transport hazard class(es) (DOT) : Not applicable

**IMDG**  
 Transport hazard class(es) (IMDG) : Not applicable

**IATA**  
 Transport hazard class(es) (IATA) : Not applicable

#### 14.4. Packing group

Packing group (DOT) : Not applicable  
 Packing group (IMDG) : Not applicable  
 Packing group (IATA) : Not applicable

#### 14.5. Environmental hazards

Other information : No supplementary information available.



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#### 14.6. Special precautions for user

##### DOT

No data available

##### IMDG

No data available

##### IATA

No data available

#### 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

### SECTION 15: Regulatory information

#### 15.1. US Federal regulations

##### 2,2,4-TRIMETHYL-1,3-PENTANEDIOL MONOISOBUTYRATE (25265-77-4)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

All components of this product are listed as Active, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

This product or mixture is not known to contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

#### 15.2. International regulations

##### CANADA

##### 2,2,4-TRIMETHYL-1,3-PENTANEDIOL MONOISOBUTYRATE (25265-77-4)

Listed on the Canadian DSL (Domestic Substances List)

##### EU-Regulations

##### 2,2,4-TRIMETHYL-1,3-PENTANEDIOL MONOISOBUTYRATE (25265-77-4)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

##### National regulations

##### 2,2,4-TRIMETHYL-1,3-PENTANEDIOL MONOISOBUTYRATE (25265-77-4)

Listed on the AICS (Australian Inventory of Chemical Substances)  
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)  
Listed on KECL/KECI (Korean Existing Chemicals Inventory)  
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)  
Listed on NZIoC (New Zealand Inventory of Chemicals)  
Listed on the Japanese ISHL (Industrial Safety and Health Law)  
Listed on INSQ (Mexican National Inventory of Chemical Substances)  
Listed on the TCSI (Taiwan Chemical Substance Inventory)  
Listed on the NCI (National Chemicals Inventory)

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#### 15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

#### SECTION 16: Other information

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Revision date : 05/07/2021

Other information : None.

#### Full text of H-phrases

H402	Harmful to aquatic life
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NFPA health hazard

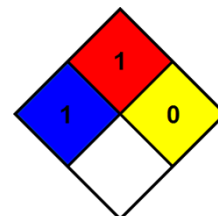
: 1 - Materials that, under emergency conditions, can cause significant irritation.

NFPA fire hazard

: 1 - Materials that must be preheated before ignition can occur.

NFPA reactivity

: 0 - Material that in themselves are normally stable, even under fire conditions.



Safety Data Sheet (SDS), USA

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