

# SAFETY DATA SHEET

Creation Date 17-May-2010

Revision Date 18-Dec-2025

Revision Number 7

This safety data sheet was created pursuant to the requirements of: US OSHA Hazard Communication Standard 2024 (29 CFR 1910.1200)

## 1. Identification

**Product Name** Linalool

**Cat No. :** AC125150000; AC125150025; AC125150050; AC125151000;  
AC125155000

**CAS No** 78-70-6  
**Synonyms** 3,7-Dimethyl-1,6-octadien-3-ol

**Recommended Use** Laboratory chemicals.  
**Uses advised against** Food, drug, pesticide or biocidal product use.

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

#### Company

Fisher Scientific Company  
One Reagent Lane  
Fair Lawn, NJ 07410  
Tel: (201) 796-7100

Acros Organics  
One Reagent Lane  
Fair Lawn, NJ 07410

#### **Emergency Telephone Number**

For information **US** call: 001-800-227-6701 / **Europe** call: +32 14 57 52 11

Emergency Number **US**:001-201-796-7100 / **Europe**: +32 14 57 52 99

**CHEMTREC** Tel. No. **US**:001-800-424-9300 / **Europe**:001-703-527-3887

## 2. Hazard(s) identification

### Classification

This chemical is considered hazardous according to [US] OSHA (29 CFR 1910.1200, 2024)

|                                   |            |
|-----------------------------------|------------|
| Flammable liquids                 | Category 4 |
| Skin Corrosion/Irritation         | Category 2 |
| Serious Eye Damage/Eye Irritation | Category 2 |
| Skin Sensitization                | Category 1 |

### Label Elements

#### **Signal Word**

Warning

#### **Hazard Statements**

Combustible liquid

Causes skin irritation  
 Causes serious eye irritation  
 May cause an allergic skin reaction



### Precautionary Statements

#### Prevention

Wash face, hands and any exposed skin thoroughly after handling  
 Wear protective gloves/protective clothing/eye protection/face protection  
 Avoid breathing dust/fume/gas/mist/vapors/spray  
 Contaminated work clothing should not be allowed out of the workplace  
 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking

#### Skin

IF ON SKIN: Wash with plenty of soap and water  
 Take off contaminated clothing  
 If skin irritation or rash occurs: Get medical advice/attention

#### Eyes

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
 If eye irritation persists: Get medical advice/attention

#### Fire

In case of fire: Use CO<sub>2</sub>, dry chemical, or foam to extinguish

#### Storage

Store in a well-ventilated place. Keep cool

#### Disposal

Dispose of contents/container to an approved waste disposal plant

#### Hazards not otherwise classified (HNOC)

None identified

#### Hazards classified under paragraph (d)(1)(ii) of 1910.1200

No information available

## 3. Composition/information on Ingredients

| Component                             | CAS No  | Weight % |
|---------------------------------------|---------|----------|
| Linalool (ex bois de rose, synthetic) | 78-70-6 | >95      |

## 4. First-aid measures

|                       |   |
|-----------------------|---|
| <b>General Advice</b> | If symptoms persist, call a physician.  |
| <b>Eye Contact</b>    | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.   |
| <b>Skin Contact</b>   | Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists, call a physician. |
| <b>Inhalation</b>     | Remove to fresh air. If not breathing, give artificial respiration. Get medical attention if symptoms occur.      |
| <b>Ingestion</b>      | Clean mouth with water and drink afterwards plenty of water.  |

|  |                                   |
|--|-----------------------------------|
| <b>Most important symptoms and effects</b> | May cause allergic skin reaction. |
| <b>Notes to Physician</b>                  | Treat symptomatically             |

## 5. Fire-fighting measures

|   |  |
|---|--|
| <b>Suitable Extinguishing Media</b>     | Water spray. Carbon dioxide (CO <sub>2</sub> ). Dry chemical. Chemical foam. Water mist may be used to cool closed containers. |
| <b>Unsuitable Extinguishing Media</b>   | No information available   |
| <b>Flash Point</b>                      | 75 °C / 167 °F   |
| <b>Method -</b>                         | No information available   |
| <b>Autoignition Temperature</b>         | 235 °C / 455 °F  |
| <b>Explosion Limits</b>                 |  |
| <b>Upper</b>                            | 5.2%   |
| <b>Lower</b>                            | 0.9%   |
| <b>Sensitivity to Mechanical Impact</b> | No information available   |
| <b>Sensitivity to Static Discharge</b>  | No information available   |

### Specific Hazards Arising from the Chemical

Combustible material. Containers may explode when heated.

### Hazardous Combustion Products

Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>).

### Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

### NFPA

| Health | Flammability | Instability | Physical hazards |
|--------|--------------|-------------|------------------|
| 2      | 2            | 0           | N/A              |

## 6. Accidental release measures

|   |  |
|---|--|
| <b>Personal Precautions</b>                 | Ensure adequate ventilation. Use personal protective equipment as required. Remove all sources of ignition. Take precautionary measures against static discharges. |
| <b>Environmental Precautions</b>            | Should not be released into the environment. Do not flush into surface water or sanitary sewer system.   |
| <b>Methods for Containment and Clean Up</b> | Keep in suitable, closed containers for disposal. Soak up with inert absorbent material. Remove all sources of ignition.   |

## 7. Handling and Storage

|                 |   |
|-----------------|---|
| <b>Handling</b> | Wear personal protective equipment/face protection. Ensure adequate ventilation. Do not get in eyes, on skin, or on clothing. Avoid ingestion and inhalation. Keep away from open flames, hot surfaces and sources of ignition. |
| <b>Storage.</b> | Keep in a dry, cool and well-ventilated place. Keep container tightly closed. Keep away from heat, sparks and flame. Incompatible Materials. Combustible material. Strong oxidizing agents. Bases. Strong acids.                |

## 8. Exposure controls / personal protection

|                            |  |
|----------------------------|--|
| <b>Exposure Guidelines</b> | This product does not contain any hazardous materials with occupational exposure |
|----------------------------|--|

limits established by the region specific regulatory bodies.

**Engineering Measures**

Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location.

**Personal Protective Equipment****Eye/face Protection**

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

**Skin and body protection**

Wear appropriate protective gloves and clothing to prevent skin exposure.

**Respiratory Protection**

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

**Recommended Filter type:**

Organic gases and vapours filter. Type A. Brown. conforming to EN14387.

**Hygiene Measures**

Handle in accordance with good industrial hygiene and safety practice.

## 9. Physical and chemical properties

**Appearance****Physical State**

Liquid

**Color**

Light yellow

**Odor**

Floral

**Odor Threshold**

No information available

**Property****Values****Melting Point/Range**

No data available

**Softening Point**

No data available

**Boiling Point/Range**

199 °C / 390.2 °F

**Flash Point**

75 °C / 167 °F

**Flammability (liquid)**

Combustible liquid

**Flammability (solid,gas)**

Not applicable

**Explosion Limits**

**Lower** 0.9

**Upper** 5.2

**Autoignition Temperature**

235 °C / 455 °F

**Decomposition Temperature**

> 200°C

**pH**

No information available

**Viscosity**

4.4 mPa s at 25 °C

**Water Solubility**

1.45 g/l (25°C)

**Solubility in other solvents**

No information available

**Partition Coefficient (n-octanol/water)****Component****log Pow**

Linalool (ex bois de rose, synthetic)

2.9

**Vapor Pressure**

0.1 mbar @ 20 °C

**Density / Specific Gravity**

0.861

**Bulk Density**

Not applicable

**Vapor Density**

No information available

**Particle characteristics**

Not applicable (liquid)

**Remarks****• Method**

@ 760 mmHg

**Method** - No information available

On basis of test data

Liquid

Liquid

(Air = 1.0)

**Other Information****Molecular Formula**

C10 H18 O

**Molecular Weight**

154.25

**Explosive Properties**

explosive air/vapour mixtures possible

## 10. Stability and reactivity

|   |  |
|---|--|
| <b>Reactive Hazard</b>                  | None known, based on information available   |
| <b>Stability</b>                        | Stable under recommended storage conditions.   |
| <b>Conditions to Avoid</b>              | Incompatible products. Keep away from open flames, hot surfaces and sources of ignition. |
| <b>Incompatible Materials</b>           | Combustible material, Strong oxidizing agents, Bases, Strong acids                       |
| <b>Hazardous Decomposition Products</b> | Carbon monoxide (CO), Carbon dioxide (CO <sub>2</sub> )                                  |
| <b>Hazardous Polymerization</b>         | No information available.  |
| <b>Hazardous Reactions</b>              | None under normal processing.  |

## 11. Toxicological information

### Information on expected route of exposure

|                   |   |
|-------------------|---|
| <b>Inhalation</b> | Not an expected route of exposure.  |
| <b>Ingestion</b>  | May be harmful if swallowed.  |
| <b>Eyes</b>       | Avoid contact with eyes. Corrosive to the eyes and may cause severe damage including blindness. May cause irritation. |
| <b>Skin</b>       | Avoid contact with skin. Skin Corrosion/Irritation. May cause irritation.   |

### Toxicology data for the components

| Component                             | LD50 Oral                 | LD50 Dermal                  | LC50 Inhalation |
|---------------------------------------|---------------------------|------------------------------|-----------------|
| Linalool (ex bois de rose, synthetic) | LD50 = 2790 mg/kg ( Rat ) | LD50 = 5610 mg/kg ( Rabbit ) | -               |

**Toxicologically Synergistic Products** No information available

**(b) skin corrosion/irritation;** Category 2

**(c) serious eye damage/irritation;** Category 2

**(d) respiratory or skin sensitization;**

**Respiratory** No data available  
**Skin** Category 1

May cause an allergic skin reaction

**(e) germ cell mutagenicity;** No data available

**(f) carcinogenicity;**

The table below indicates whether each agency has listed any ingredient as a carcinogen

| Component                             | CAS No  | IARC       | NTP        | ACGIH      | OSHA       | Mexico     |
|---------------------------------------|---------|------------|------------|------------|------------|------------|
| Linalool (ex bois de rose, synthetic) | 78-70-6 | Not listed | Not listed | Not listed | Not listed | Not listed |

**(g) reproductive toxicity;** No data available

|  |  |
|--|--|
| <b>(h) STOT-single exposure;</b>                 | No data available  |
| <b>(i) STOT-repeated exposure;</b>               | No data available  |
| <b>Target Organs</b>                             | No information available.  |
| <b>(j) aspiration hazard;</b>                    | No data available  |
| <b>Other Adverse Effects</b>                     | The toxicological properties have not been fully investigated.             |
| <b>Symptoms / effects,both acute and delayed</b> | No information available.  |
| <b>Other Adverse Effects</b>                     | The toxicological properties have not been fully investigated.             |
| <b>Endocrine Disrupting Properties</b>           | This product does not contain any known or suspected endocrine disruptors. |

## 12. Ecological information

### Ecotoxicity

Do not empty into drains.

| Component                             | Freshwater Algae                                    | Freshwater Fish  | Microtox                | Water Flea                              |
|---------------------------------------|---|--|-------------------------|---|
| Linalool (ex bois de rose, synthetic) | EC50: = 88.3 mg/L, 96h<br>(Desmodesmus subspicatus) | LC50: = 27.8 mg/L, 96h<br>static (Oncorhynchus mykiss) | EC50 = 1000 mg/L 30 min | EC50: = 20 mg/L, 48h<br>(Daphnia magna) |

|                                      |   |
|--------------------------------------|---|
| <b>Persistence and Degradability</b> | Persistence is unlikely   |
| <b>Bioaccumulation/ Accumulation</b> | No information available.   |
| <b>Mobility</b>                      | Will likely be mobile in the environment due to its water solubility. |

| Component                             | log Pow |
|---------------------------------------|---------|
| Linalool (ex bois de rose, synthetic) | 2.9     |

## 13. Disposal considerations

|                               |   |
|-------------------------------|---|
| <b>Waste Disposal Methods</b> | Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification. |
|-------------------------------|---|

## 14. Transport information

|                             |   |
|-----------------------------|---|
| <b>DOT</b>                  | COMBUSTIBLE LIQUID, NOT REGULATED FOR TRANSPORT IN THIS QUANTITY<br>According to 49 CFR §173.150(f)(1), this material should reclassified as NA1993, Combustible Liquid, NOS if it is shipped in bulk |
| <b>UN-No</b>                | NA1993  |
| <b>Proper Shipping Name</b> | Combustible liquid, n.o.s.  |
| <b>Packing Group</b>        | III   |
| <b>TDG</b>                  | Not regulated   |
| <b>IATA</b>                 | Not regulated   |
| <b>IMDG/IMO</b>             | Not regulated   |

## 15. Regulatory Information

### United States of America Inventory

| Component                             | CAS No  | TSCA | TSCA Inventory notification - Active-Inactive | TSCA - EPA Regulatory Flags |
|---------------------------------------|---------|------|---|-----------------------------|
| Linalool (ex bois de rose, synthetic) | 78-70-6 | X    | ACTIVE  | -                           |

**Legend:**

TSCA US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)

X - Listed

- - Not Listed

**TSCA - Per 40 CFR 751, Regulation of Certain Chemical Substances & Mixtures, Under TSCA Section 6(h) (PBT)** Not applicable

**TSCA 12(b)** - Notices of Export Not applicable

**International Inventories**

Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Japan (ISHL), Australia (AICS), China (IECSC), Korea (KECL).

| Component                             | CAS No  | DSL | NDSL | EINECS    | PICCS | ENCS | ISHL | AICS | IECSC | KECL     |
|---------------------------------------|---------|-----|------|-----------|-------|------|------|------|-------|----------|
| Linalool (ex bois de rose, synthetic) | 78-70-6 | X   | -    | 201-134-4 | X     | X    | X    | X    | X     | KE-11592 |

KECL - NIER number or KE number (<http://ncis.nier.go.kr/en/main.do>)

**U.S. Federal Regulations****SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

**SARA 311/312 Hazard Categories**

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

**CWA (Clean Water Act)** Not applicable

**Clean Air Act** Not applicable

**OSHA - Occupational Safety and Health Administration** Not applicable

**CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

**California Proposition 65** This product does not contain any Proposition 65 chemicals.

**U.S. State Right-to-Know Regulations** Not applicable

**U.S. Department of Transportation**

Reportable Quantity (RQ): N

DOT Marine Pollutant N

DOT Severe Marine Pollutant N

U.S. Department of Homeland Security This product does not contain any DHS chemicals.

**Other International Regulations**

Mexico - Grade No information available

**Authorisation/Restrictions according to EU REACH**

| Component                             | CAS No  | REACH (1907/2006) - Annex XIV - Substances Subject to Authorization | REACH (1907/2006) - Annex XVII - Restrictions on Certain Dangerous Substances | REACH Regulation (EC 1907/2006) article 59 - Candidate List of Substances of Very High Concern (SVHC) |
|---------------------------------------|---------|---|---|---|
| Linalool (ex bois de rose, synthetic) | 78-70-6 | -   | Use restricted. See entry 75.<br>(see link for restriction details)           | -   |

**REACH links**<https://echa.europa.eu/substances-restricted-under-reach>**Safety, health and environmental regulations/legislation specific for the substance or mixture**

| Component                             | CAS No  | OECD HPV | Persistent Organic Pollutant | Ozone Depletion Potential | Restriction of Hazardous Substances (RoHS) |
|---------------------------------------|---------|----------|------------------------------|---------------------------|--|
| Linalool (ex bois de rose, synthetic) | 78-70-6 | Listed   | Not applicable               | Not applicable            | Not applicable                             |

**Contains component(s) that meet a 'definition' of per & poly fluoroalkyl substance (PFAS)?**

Not applicable

**Other International Regulations**

| Component                             | CAS No  | Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident Notification | Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report Requirements | Rotterdam Convention (PIC) | Basel Convention (Hazardous Waste) |
|---------------------------------------|---------|---|--|----------------------------|------------------------------------|
| Linalool (ex bois de rose, synthetic) | 78-70-6 | Not applicable  | Not applicable   | Not applicable             | Not applicable                     |

**16. Other Information**

**Prepared By** Product stewardship (Regulatory Affairs)  
Thermo Fisher Scientific  
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**Creation Date** 17-May-2010  
**Revision Date** 18-Dec-2025  
**Print Date** 18-Dec-2025  
**Revision Summary** Updated to the U.S. Department of Labor's Occupational Safety and Health Administration (OSHA) which published its Final Rule in the Federal Register revising the Hazard Communication Standard (HCS/HazCom), 29 CFR 1910.1200 (2024) (HCS §1910.1200, 2024), May 20, 2024, effective July 19, 2024.

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

**End of SDS**