



SAFETY DATA SHEET

www.TerpScienceLabs.com

Section 1: Identification

Product and Company Identification

Product Name: α -Pinene

Chemical Name/Synonyms: C₁₀H₁₆

CAS NO.: 80-56-8

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

Identified uses : Laboratory chemicals, Synthesis of substances

Details of Supplier of Safety Data Sheet

Company: Terp Science Labs.

215 E 4th St.

Unit P-36

Los Angeles, 90013

USA

Contact: Brent Borrow

Telephone: 1(323) 625 - 0228

Email: TSLabs323@gmail.com

Website: www.TerpScienceLabs.com

In emergency call 911.

For information about this SDS, use this department contact phone#: 1 (323) 625-0228

Section 2: Hazard(s) Identification

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Flammable liquids (Category 3), H226

Skin irritation (Category 2), H315

Skin sensitisation (Category 1), H317 Aspiration hazard (Category 1), H304

Acute aquatic toxicity (Category 3), H402

Chronic aquatic toxicity (Category 2), H411

Signal Word(s): Danger

Hazard Statements:

H226 Flammable liquid and vapour.

H304 May be fatal if swallowed and enters airways.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H402 Harmful to aquatic life.

H411 Toxic to aquatic life with long lasting effects.



Pictograms:

Precautionary Statements:

- P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
- P233 Keep container tightly closed. Ground/bond container and receiving equipment.
- P241 Use explosion-proof electrical/ ventilating/ lighting equipment.
- P242 Use only non-sparking tools.
- P243 Take precautionary measures against static discharge.
- P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
- P264 Wash skin thoroughly after handling.
- P272 Contaminated work clothing should not be allowed out of the workplace.
- P273 Avoid release to the environment.
- P280 Wear protective gloves/ eye protection/ face protection.
- P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.
- P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
- P331 Do NOT induce vomiting.
- P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.
- P362 Take off contaminated clothing and wash before reuse.
- P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.
- P391 Collect spillage.
- P403 + P235 Store in a well-ventilated place. Keep cool.
- P405 Store locked up.
- P501 Dispose of contents/ container to an approved waste disposal plant.

Description of other hazards: None

Section 3: Composition/ Information on Ingredients

Substances

Synonyms: alpha-Pinene

Formula : C₁₀H₁₆

Molecular weight : 136.23 g/mol

CAS-No. : 80-56-8

EC-No. : 201-291-9

Chemical Name	Classification	Concentration	
α-Pinene	Flam. Liq. 3; Skin Irrit. 2; Skin Sens. 1; Asp. Tox. 1; Aquatic Acute 3; Aquatic Chronic 2; H226, H304, H315, H317, H402, H411	<= 100 %	

Section 4: First-Aid Measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

After skin contact:

Wash off with soap and plenty of water. Consult a physician

After eye contact:

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

After inhalation:

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

After swallowing:

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

Section 5: Fire-Fighting Measures

Extinguishing media

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special hazards arising from the substance or mixture

Carbon oxides

Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

Further information

Use water spray to cool unopened containers

Section 6: Accidental Release Measures

Personal precautions:

Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

Measures for environmental protection:

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

Measures for cleaning/collecting:

Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13). Keep in suitable, closed containers for disposal.

Section 7: Handling and Storage

Handling:

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge.

Storage:

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.
Storage class (TRGS 510): 3: Flammable liquids

Specific end use(s):

No other specific uses are stipulated

Section 8: Exposure Controls/Personal Protection

Components with workplace control parameters

Remarks: Central Nervous System impairment
Upper Respiratory Tract irritation
Lung damage
Skin irritation

Adopted values or notations enclosed are those for which changes are proposed in the NIC
See Notice of Intended Changes (NIC) Not classifiable as a human carcinogen
Sensitizer
varies

Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eye/face protection

Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Body Protection

Impervious clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multipurpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

Section 9: Physical and Chemical Properties

Information on basic physical and chemical properties

Appearance	Form: liquid Colour: colorless
Odour	characteristic
Odour Threshold	No data available
pH	No data available
Melting point/freezing point	Melting point/range: -64 °C (-83 °F) at 1,013 hPa (760 mmHg)
Initial boiling point and boiling range	155 - 156 °C (311 - 313 °F) - lit.
Flash point	31 °C (88 °F) at ca.1,013 hPa (760 mmHg) - closed cup
Evaporation rate	No data available
Flammability (solid, gas)	No data available
Upper/lower flammability or explosive limits	No data available
Vapour pressure	7 hPa (5 mmHg) at 20 °C (68 °F) - OECD Test Guideline 104
Vapour density	No data available
Relative density	0.858 g/cm ³ at 25 °C (77 °F) - lit
Water solubility	0.00004 g/l at 20 °C (68 °F) - OECD Test Guideline 105 - insoluble
Partition coefficient: noctanol/water	log Pow: 4.487 - OECD Test Guideline 107
Auto-ignition temperature	255 °C (491 °F) at 996 hPa (747 mmHg)
Decomposition temperature	No data available
Viscosity	No data available
Explosive properties	No data available
Oxidizing properties	No data available
Other safety information	No data available

Section 10: Stability and Reactivity

Reactivity: No data available

Chemical stability: Stable under recommended storage conditions

Possibility of hazardous reactions: Vapours may form explosive mixture with air.

Conditions to avoid: Heat, flames and sparks

Incompatible materials: Strong oxidizing agents

Hazardous decomposition products:

Hazardous decomposition products formed under fire conditions. - Carbon oxides
Other decomposition products - No data available

Section 11: Toxicological Information

Information on toxicological effects

Acute toxicity

LD50 Oral - Rat - 3,700 mg/kg

Remarks: Brain and Coverings:Recordings from specific areas of CNS. Behavioral:Somnolence (general depressed activity). Lungs, Thorax, or Respiration:Other changes.

Inhalation: No data available

LD50 Dermal - Rabbit - > 5,000 mg/kg

Skin corrosion/irritation

Skin - Human

Result: Irritating to skin. - 15 min
(EPISKIN Human Skin Model Test)

Serious eye damage/eye irritation

No data available

Respiratory or skin sensitisation

No data available

Germ cell mutagenicity

Ames test

S. typhimurium

Result: negative

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

Additional Information

Repeated dose toxicity

Mouse - male and female - Inhalation - NOAEL : 278.609 mg/m³

RTECS: DT7000000

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated

Section 12: Ecological Information (non-mandatory)

Toxicity

Toxicity to daphnia and other aquatic invertebrates
EC50 - Daphnia magna (Water flea) - 41 mg/l - 48 h

Persistence and degradability

Biodegradability
aerobic - Exposure time 28 d
Result: 62 % - Readily biodegradable. (OECD Test Guideline 301B)
Remarks: The 10 day time window criterion is not fulfilled.

Bioaccumulative potential

No data available

Mobility in soil

No data available

Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

Other adverse effects

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Toxic to aquatic life with long lasting effects.

Section 13: Disposal Considerations (non-mandatory)**Waste treatment methods****Product**

This combustible material may be burned in a chemical incinerator equipped with an afterburner and scrubber. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

Contaminated packaging

Dispose of as unused product.

Section 14: Transport Information (non-mandatory)**DOT (US)**

UN-Number: 2368 Class: 3 Packing group: III
Proper shipping name: alpha-Pinene
Reportable Quantity (RQ): Marine pollutant: yes
Poison Inhalation Hazard: No

IMDG

UN-Number: 2368 Class: 3 Packing group: III EMS-No: F-E, S-E
Proper shipping name: alpha-PINENE
Marine pollutant : yes

IATA

UN-Number: 2368 Class: 3 Packing group: III
Proper shipping name: alpha-Pinene

Section 15: Regulatory Information (non-mandatory)

SARA 302 Components

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312

Hazards Fire Hazard, Acute Health Hazard

Massachusetts Right To Know Components

α -Pinene CAS-No. 80-56-8

Pennsylvania Right To Know Components

α -Pinene CAS-No. 80-56-8

New Jersey Right To Know Components

α -Pinene CAS-No. 80-56-8

California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

Section 16: Other Information

Employers should only use this information only as a supplement to other information gathered by them , and should make judgement suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Safety Data Sheet , or in any combination with any other product or process, is the responsibility of the user.

Preparation Information Terp Science Labs

SDS date of preparation/update: 9/1/2019