

Safety Data Sheet

according to 1907/2006/EC, Article 31

Revision: 20.08.2010

Printing date 20.08.2010

1 Identification of substance

Product details

Trade name

(-)-alpha-Pinene

Stock number:

L04759

Manufacturer/Supplier:

Alfa Aesar GmbH & Co.KG
Benzstrasse 3
D-76185 Karlsruhe / GermanyE-mail: gcat@matthey.com
www.alfa-chemcat.com

Informing department:

Product safety department.

Emergency information:

Giftnotruf Universität Mainz / Poison Information Center Mainz
www.giftinfo.uni-mainz.de Telefon: +49(0)6131/19240

2 Hazards identification

Hazard designation:

Xn Harmful
N Dangerous for the environment

Information pertaining to particular dangers for man and environment

R 10 Flammable.
 R 20/21/22 Harmful by inhalation, in contact with skin and if swallowed.
 R 36/38 Irritating to eyes and skin.
 R 43 May cause sensitisation by skin contact.
 R 51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
 R 65 Harmful: may cause lung damage if swallowed.

GHS label elements

**Danger**

H304 - May be fatal if swallowed and enters airways.

**Warning**

H226 - Flammable liquid and vapour.

**Warning**

H302 - Harmful if swallowed.
 H312 - Harmful in contact with skin.
 H332 - Harmful if inhaled.
 H315 - Causes skin irritation.
 H319 - Causes serious eye irritation.
 H317 - May cause an allergic skin reaction.



H411 - Toxic to aquatic life with long lasting effects.
 P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
 P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
 P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P405 Store locked up.
 P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Prevention:

Response:

Storage:

Disposal:

3 Composition/information on ingredients

Chemical characterization:

Designation: (CAS#)

(-)-alpha-Pinene (CAS# 7785-26-4): 100%

Identification number(s):

232-077-3

EINECS Number:

4 First aid measures

After inhalation

Supply fresh air and call for doctor for safety reasons.
Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

After skin contact

Seek immediate medical advice.
Instantly wash with water and soap and rinse thoroughly.

After eye contact

Seek immediate medical advice.
Rinse opened eye for several minutes under running water. Then consult doctor.

After swallowing

Seek immediate medical advice.

5 Fire fighting measures

Suitable extinguishing agents

CO2, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.

Special hazards caused by the material, its products of combustion or flue gases:

Can be released in case of fire:
 Carbon monoxide and carbon dioxide
 Wear self-contained breathing apparatus.
 Wear full protective suit.

Protective equipment:

6 Accidental release measures

Person-related safety precautions:

Wear protective equipment. Keep unprotected persons away.
Ensure adequate ventilation

Measures for environmental protection:

Keep away from ignition sources
 Do not allow material to be released to the environment without proper governmental permits.
 Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
 Dispose of contaminated material as waste according to item 13.

Measures for cleaning/collecting:

Ensure adequate ventilation.
 Keep away from ignition sources.
 See Section 7 for information on safe handling
 See section 8 for information on personal protection equipment.
 See Section 13 for information on disposal.

Additional information:

7 Handling and storage

Handling

Information for safe handling:

Keep containers tightly sealed.
 Store in cool, dry place in tightly closed containers.
 Ensure good ventilation/exhaustion at the workplace.

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Information about protection against explosions and fires:

Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
Fumes can combine with air to form an explosive mixture.

Storage Requirements to be met by storerooms and containers:

No special requirements.

Information about storage in one common storage facility:

Store away from oxidizing agents.

Further information about storage conditions:

Keep container tightly sealed.
Store in cool, dry conditions in well sealed containers.

8 Exposure controls and personal protection

Additional information about design of technical systems:

Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute.

Components with critical values that require monitoring at the workplace: Additional information:

Not required.
No data

Personal protective equipment General protective and hygienic measures

The usual precautionary measures should be adhered to in handling the chemicals.
Keep away from foodstuffs, beverages and food.
Instantly remove any soiled and impregnated garments.
Wash hands during breaks and at the end of the work.
Avoid contact with the eyes and skin.

Breathing equipment:

Use breathing protection with high concentrations.

Protection of hands:

Check protective gloves prior to each use for their proper condition.

Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

Penetration time of glove material Eye protection:

Impervious gloves

Not determined

Safety glasses

Face protection

Body protection:

Protective work clothing.

9 Physical and chemical properties:

General Information

Form: Liquid
Colour: Colourless
Smell: Not determined

Change in condition

Melting point/Melting range: -64°C
Boiling point/Boiling range: 154-156°C
Sublimation temperature / start: Not determined

Flash point: 32°C

Ignition temperature: Not determined

Decomposition temperature: Not determined

Critical values for explosion:

Lower: Not determined
Upper: Not determined

Steam pressure: Not determined

Density at 20°C 0.856 g/cm³

Solubility in / Miscibility with

Water: Not miscible or difficult to mix

10 Stability and reactivity

Thermal decomposition / conditions to be avoided:

No decomposition if used and stored according to specifications.

Materials to be avoided:

Oxidizing agents

Dangerous reactions:

No dangerous reactions known

Dangerous products of decomposition:

Carbon monoxide and carbon dioxide

11 Toxicological information

Acute toxicity:

Primary irritant effect:

on the skin:

Irritant for skin and mucous membranes.

on the eye:

Irritant effect.

Sensitization:

Sensitization possible by skin contact.

Additional toxicological information:

To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.

Danger by skin resorption.

No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH.

Sensitisation

May cause sensitisation by skin contact.

12 Ecological information:

Ecotoxicological effects:

Remark:

Toxic for fish

Additional ecological information:

General notes:

Do not allow product to reach ground water, water bodies or sewage system.

Water hazard class 2 (Self-assessment): hazardous for water.

Danger to drinking water if even small quantities leak into soil.

Also poisonous for fish and plankton in water bodies.

Do not allow material to be released to the environment without proper governmental permits.

Toxic for aquatic organisms

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13 Disposal considerations

Product:	
Recommendation	Consult state, local or national regulations for proper disposal. Hand over to disposers of hazardous waste. Must be specially treated under adherence to official regulations.
Uncleaned packagings:	
Recommendation:	Disposal must be made according to official regulations.

14 Transport information

Land transport ADR/RID and GGVS/GGVE (cross-border/domestic)



ADR/RID-GGVS/E Class:	3 (F1) Flammable liquids.
Kemler Number:	30
UN-Number:	2368
Packaging group:	III
Label	3
Special marking:	Symbol (fish and tree)
Designation of goods:	2368 alpha-PINENE
Tunnel restriction code	D/E

Maritime transport IMDG/GGVSea:



IMDG/GGVSea Class:	3
UN Number:	2368
Label	3
Packaging group:	III
Marine pollutant:	No
Correct technical name:	Alpha-PINENE

Air transport ICAO-TI and IATA-DGR:



ICAO/IATA Class:	3
UN/ID Number:	2368
Label	3
Packaging group:	III
Correct technical name:	Alpha-PINENE

UN "Model Regulation":

Environmental hazards: UN2368, alpha-PINENE, 3, III
Environmentally hazardous substance, liquid; Marine Pollutant

15 Regulatory information

Designation according to EC guidelines:

Code letter and hazard designation of product:



Xn Harmful
N Dangerous for the environment

Risk phrases:

- 10 Flammable.
20/21/22 Harmful by inhalation, in contact with skin and if swallowed.
36/38 Irritating to eyes and skin.
43 May cause sensitisation by skin contact.
51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
65 Harmful: may cause lung damage if swallowed.

Safety phrases:

- 9 Keep container in a well-ventilated place.
26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
36/37 Wear suitable protective clothing and gloves.
57 Use appropriate container to avoid environmental contamination.

National regulations

Information about limitation of use:

Employment restrictions concerning young persons must be observed.
For use only by technically qualified individuals.

Water hazard class:

Water hazard class 2 (Self-assessment): hazardous for water.

16 Other information:

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgement of 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 Material Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.

Department issuing data specification sheet: Health, Safety and Environmental Department.

Contact: Zachariah Holt

Abbreviations and acronyms: ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organization

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)