

Section 1: Identification of the substance/mixture and of the company/undertaking

Product identifier

Name of the substance	Alpha - pinene
Trade name of the substance	SYLVAPINE™ 402 SF
Identification Number	80-56-8
Registration number	01-2119519223-49-0001
Synonyms	None.
Product code	2000972, 2000973
Date of first issue	23-November-2010
Version number	01
Revision date	-
Supersedes date	-

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

Identified uses	Industrial uses: Uses of substances as such or in preparations at industrial sites Intermediate
Uses advised against	None known.

Details of the supplier of the safety data sheet

Supplier

Company name	Arizona Chemical BV
Address	Transistorstraat 16 1322 CE Almere NL
Division	
Phone	+31 36 546 2800
Fax	+31 36 546 2996
e-mail	regulatory.eu@azchem.com
Contact person	
Emergency telephone number	Emergency-EU NCEC: +44 1865 407 333
SDS number	4492E

Section 2: Hazards identification

Classification of the substance or mixture

The substance has been assessed and/or tested for its physical, health and environmental hazards and the following classification applies.

Classification according to Directive 67/548/EEC or 1999/45/EC as amended

Classification R10, Xn;R65, Xi;R38, R43

The full text for all R-phrases is displayed in section 16.

Classification according to Regulation (EC) No 1272/2008 as amended

Physical hazards

Flammable liquids	Category 3	Flammable liquid and vapour.
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Health hazards

Skin corrosion/irritation	Category 2	Causes skin irritation.
Skin sensitisation	Category 1	May cause an allergic skin reaction.
Aspiration hazard	Category 1	May be fatal if swallowed and enters airways.

Hazard summary

Physical hazards	Flammable.
Health hazards	Irritating to skin. May cause sensitization by skin contact. Harmful: may cause lung damage if swallowed.
Environmental hazards	Not classified for hazards to the environment.
Specific hazards	Not applicable.
Main symptoms	Sensitisation. May cause delayed lung damage.

Label elements

Label according to Regulation (EC) No. 1272/2008 as amended

Contains:	Alpha - pinene
Identification Number	80-56-8



Signal word	Danger
Hazard statements	Flammable liquid and vapour. May be fatal if swallowed and enters airways. May cause an allergic skin reaction. Causes skin irritation.

Precautionary statements

Prevention	Wear protective gloves/protective clothing/eye protection/face protection.
Response	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Do NOT induce vomiting. IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention.
Storage	Not available.
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.
Supplemental label information	Not applicable.
Other hazards	Not assigned.

Section 3: Composition/information on ingredients

Substance

General information

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	INDEX No.	Notes
Alpha - pinene	100	80-56-8 201-291-9	01-2119519223-49-00	-	

Classification: **DSD:** R10, Xn;R65, Xi;R38, R43
CLP: Flam. Liq. 3;H226, Asp. Tox. 1;H304, Skin Irrit. 2;H315, Skin Sens. 1;H317

DSD: Directive 67/548/EEC.
CLP: Regulation No. 1272/2008.
#: This substance has workplace exposure limit(s).

Composition comments The full text for all R- and H-phrases is displayed in section 16.

Section 4: First aid measures

General information Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wash contaminated clothing before reuse.

Description of first aid measures

Inhalation	Move into fresh air and keep at rest. Get medical attention if any discomfort continues.
Skin contact	Take off immediately all contaminated clothing. Wash off with soap and plenty of water. For minor skin contact, avoid spreading material on unaffected skin. Get medical attention if irritation develops and persists.
Eye contact	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Get medical attention if irritation develops and persists.
Ingestion	Call a physician or poison control centre immediately. Rinse mouth. Do not induce vomiting. Aspiration may cause pulmonary oedema and pneumonitis.

Most important symptoms and effects, both acute and delayed May cause allergic skin reaction. Aspiration may cause pulmonary oedema and pneumonitis.

Indication of any immediate medical attention and special treatment needed Keep person under observation. Symptoms may be delayed.

Section 5: Firefighting measures

General fire hazards Flammable liquid.

Extinguishing media

Suitable extinguishing media Dry chemical, CO₂, water spray or alcohol resistant foam.

Unsuitable extinguishing media Do not use water jet as an extinguisher, as this will spread the fire.

Special hazards arising from the substance or mixture By heating and fire, harmful vapours/gases may be formed.

Advice for firefighters

Special protective equipment for firefighters Wear suitable protective equipment.

Special firefighting procedures In the event of fire, cool tanks with water spray. Water runoff can cause environmental damage.

Section 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel Keep unnecessary personnel away. Local authorities should be advised if significant spillages cannot be contained. Do not touch or walk through spilled material. Ventilate closed spaces before entering them.

For emergency responders See Section 8 for personal protective equipment.

Environmental precautions Prevent further leakage or spillage if safe to do so. Do not contaminate water.

Methods and material for containment and cleaning up ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Keep combustibles (wood, paper, oil etc) away from spilled material. Absorb spillage with non-combustible, absorbent material. Following product recovery, flush area with water. Prevent product from entering drains. For waste disposal, see section 13.

Reference to other sections See Section 8 for personal protective equipment. For waste disposal, see section 13.

Section 7: Handling and storage

Precautions for safe handling DO NOT handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Do not smoke. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Use non-sparking tools and explosion-proof equipment. Avoid contact with skin. Avoid release to the environment. Do not empty into drains.

Conditions for safe storage, including any incompatibilities DO NOT handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Store in cool place. Store in a well-ventilated place. Keep container tightly closed.

Specific end use(s) Not available.

Section 8: Exposure controls/personal protection

Control parameters

Occupational exposure limits No exposure limits noted for the ingredient(s).

Biological limit values No biological exposure limits noted for the ingredient(s).

Recommended monitoring procedures Not available.

DNEL

Material	Type	Route	Value	Form
Alpha - pinene (80-56-8)	Professional	Inhalation Dermal	5.9800 µg/l 161.0000 µg	/cm ²

PNEC

Material	Type	Route	Value	Form
Alpha - pinene (80-56-8)	Not applicable	Soil	0.5390 µg/g	
		Water	4.0000 µg/l	fresh
		Water	0.4000 µg/l	sea
		Oral	1.3500 µg/g	

Exposure controls

Appropriate engineering controls Explosion-proof general and local exhaust ventilation.

Individual protection measures, such as personal protective equipment

General information	Not available.
Eye/face protection	Wear eye/face protection.
Skin protection	
- Hand protection	Wear protective gloves.
- Other	Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.
Respiratory protection	When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Use respiratory equipment with gas filter, type A2.
Thermal hazards	Wear appropriate personal protective equipment.

Hygiene measures When using, do not eat, drink or smoke. Avoid contact with skin. Contaminated work clothing should not be allowed out of the workplace. Handle in accordance with good industrial hygiene and safety practices.

Environmental exposure controls Not available.

Section 9: Physical and chemical properties**Information on basic physical and chemical properties**

Appearance	Liquid.
Physical state	Liquid.
Form	Liquid.
Colour	Colourless.
Odour	Characteristic.
Odour threshold	Not available.
pH	Not applicable.
Melting point/freezing point	-58 °C (-72.4 °F)
Boiling point, initial boiling point, and boiling range	152 - 157 °C (305.6 - 314.6 °F)
Flash point	34 °C (93 °F)
Auto-ignition temperature	255 °C (491 °F)
Flammability (solid, gas)	Not available.
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Oxidising properties	Not applicable.
Explosive properties	Not applicable.
Explosive limit	Not applicable.
Vapour pressure	690 Pa 851 Pa
Evaporation rate	Not applicable.
Relative density	0.86 (25°C)
Solubility (water)	< 0.04 mg/l (20°C)

Partition coefficient (n-octanol/water)	4.49 (25°C)
Decomposition temperature	Not available.
Viscosity	1.2 mPa·s
Percent volatile	Not available.
Other data	
Molecular formula	C10-H16
Molecular weight	136.24 g/mol
Other information	No relevant additional information available.

Section 10: Stability and reactivity

Reactivity	Avoid contact with oxidisers or reducing agents.
Chemical stability	Stable under normal temperature conditions.
Possibility of hazardous reactions	None known.
Conditions to avoid	Heat, flames and sparks.
Incompatible materials	Strong acids, alkalies and oxidizing agents.
Hazardous decomposition products	Carbon oxides.

Section 11: Toxicological information

General information	Not applicable.
Information on likely routes of exposure	
Ingestion	May be fatal if swallowed and enters airways.
Inhalation	May cause irritation to the respiratory system.
Skin contact	May cause an allergic skin reaction. Causes skin irritation.
Eye contact	Contact with eyes may cause irritation.
Symptoms	NOTE! Effects may be delayed. Keep affected person under observation.
Information on toxicological effects	
Acute toxicity	May be fatal if swallowed and enters airways.

Product	Test results
Alpha - pinene (80-56-8)	Acute Dermal LD50 Rat: > 2000 mg/kg Acute Oral LD50 Rat: 3700 mg/kg

* Estimates for product may be based on additional component data not shown.

Skin corrosion/irritation	Causes skin irritation.
Serious eye damage/eye irritation	May irritate eyes.
Respiratory sensitisation	Not available.
Skin sensitisation	May cause an allergic skin reaction.
Germ cell mutagenicity	Not classified.
Carcinogenicity	Not available.
Reproductive toxicity	

Not classified.

Product	Test results
Alpha - pinene	250 mg/kg/day
Specific target organ toxicity - single exposure	Not available.
Specific target organ toxicity - repeated exposure	Not available.
Aspiration hazard	May be fatal if swallowed and enters airways.
Mixture versus substance information	Not available.
Other information	Not available.

Section 12: Ecological information

Toxicity

Product

Alpha - pinene (80-56-8)

Test results

EC50 Daphnia: 68 mg/l 48.00 hours >>solubility limit

LC50 Fish: 0.28 mg/l 96.00 hours >>solubility limit

Persistence and degradability

Expected to biodegrade slowly.

Bioaccumulative potential

Bioaccumulation is unlikely to be significant because of the low water solubility of this product.

Mobility

The product is immiscible with water and will spread on the water surface.

Environmental fate - Partition coefficient

Log Pow=4.49

Mobility in soil

None known.

Results of PBT and vPvB assessment

Not classified.

Not classified.

Not classified.

Other adverse effects

None known.

Section 13: Disposal considerations

Waste treatment methods

Residual waste

Avoid discharge into drains, water courses or onto the ground. Dispose of in accordance with local regulations.

Contaminated packaging

Empty containers should be taken to an approved waste handling site for recycling or disposal.

EU waste code

The Waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Disposal methods/information

Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Dispose of contents/container in accordance with local/regional/national/international regulations.

Section 14: Transport information

ADR

UN number

UN2368

UN proper shipping name

alpha-PINENE

Transport hazard class(es)

3

Subsidiary class(es)

-

Packing group

III

Environmental hazards

No

Tunnel restriction code

D/E

Labels required

3

Special precautions for user

Not available.

RID

UN number

UN2368

UN proper shipping name

alpha-PINENE

Transport hazard class(es)

3

Subsidiary class(es)

-

Packing group

III

Environmental hazards

No

Labels required

3

Special precautions for user

Not available.

ADN

UN number

UN2368

UN proper shipping name

alpha-PINENE

Transport hazard class(es)

3

Subsidiary class(es)

-

Packing group

III

Environmental hazards

No

Labels required

3

Special precautions for user Not available.

IATA

UN number UN2368
UN proper shipping name alpha-Pinene
Transport hazard class(es) 3
Subsidiary class(es) -
Packing group III
Environmental hazards No
ERG Code 3L
Special precautions for user Not available.

IMDG

UN number UN2368
UN proper shipping name alpha-PINENE
Transport hazard class(es) 3
Subsidiary class(es) -
Packing group III
Marine pollutant No
EmS No. F-E, S-E
Special precautions for user Not available.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code No information available.

Section 15: Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture

EU Regulations

Directive 2004/37/EC on the protection of workers from the risks related to exposure to carcinogens and mutagens at work

Not regulated.

Directive 92/85/EEC: on the safety and health of pregnant workers and workers who have recently given birth or are breastfeeding.

Not regulated.

Directive 96/61/EC concerning integrated pollution prevention and control (IPPC): Article 15, European Pollution Emission Registry (EPER)

Not regulated.

Directive 96/82/EC (Seveso II) on the control of major-accident hazards involving dangerous substances

Not regulated.

Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

Always applicable.

Regulation (EC) No. 1907/2006 Annex XIV Substance subject to authorisation

Not regulated.

Regulation (EC) No. 1907/2006 Annex XVII Substances subject to restriction on marketing and use

Not regulated.

Regulation (EC) No. 2037/2000 on substances that deplete the ozone layer

Not regulated.

Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals

Not regulated.

Other regulations

Young people under 18 years old are not allow to work with this product according to the EU Directive 94/33/EC on the protection of young people at work. This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006.

National regulations

Not available.

Chemical safety assessment

A Chemical Safety Assessment has been carried out for this substance.

Water hazard class

VwVws

WGK1, ID Number 5951

Section 16: Other information

List of abbreviations

Not available.

References	Not available.
Information on evaluation method leading to the classification of mixture	Not available.
Full text of any statements or R-phrases and H-phrases under Sections 2 to 15	R10 Flammable. R38 Irritating to skin. R43 May cause sensitization by skin contact. R65 Harmful: may cause lung damage if swallowed. 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.
Revision information	Section 11: Toxicological information: Skin sensitisation
Training information	Not available.
Disclaimer	The information in the sheet was written based on the best knowledge and experience currently available.
Issue date	15-March-2011
Revision date	15-March-2011
Print date	15-March-2011
SDS sections updated	Section 11: Toxicological information: Skin sensitisation