

Creation Date 15-Dec-2009

Revision Date 10-Nov-2010

Revision Number 1

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier

Product Description:

alpha-Pinene

Cat No.

164360000; 164360010; 164360050; 164362500

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

Recommended Use

Laboratory chemicals

Uses advised against

No Information available

Details of the supplier of the safety data sheet

Company

Acros Organics BVBA
Janssen Pharmaceuticaal 3a
2440 Geel, Belgium

E-mail address

begel.sdsdesk@thermofisher.com

Emergency Telephone Number

For information in the US, call: 800-ACROS-01

For information in Europe, call: +32 14 57 52 11

Emergency Number, Europe: +32 14 57 52 99

Emergency Number, US: 201-796-7100

CHEMTREC Phone Number, US: 800-424-9300

CHEMTREC Phone Number, Europe: 703-527-3887

2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

REGULATION (EC) No 1272/2008

Aspiration Toxicity	Category 1
Acute Inhalation Toxicity - Dusts and Mists	Category 4
Skin Corrosion / irritation	Category 2
Serious Eye Damage/Eye Irritation	Category 2A
Skin Sensitization	Category 1
Chronic aquatic toxicity	Category 2
Flammable liquids.	Category 3

Classification according to EU Directives 67/548/EEC or 1999/45/EC

For the full text of the R phrases mentioned in this Section, see Section 16

Symbol(s)

Xn - Harmful

N - Dangerous for the environment

R -phrase(s)

R10 - Flammable

R20 - Harmful by inhalation

R43 - May cause sensitization by skin contact

R65 - Harmful: may cause lung damage if swallowed

R36/38 - Irritating to eyes and skin

R51/53 - Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

Risk Combination Phrases

2. HAZARDS IDENTIFICATION

Label Elements



Signal Word

Danger

Hazard Statements

H304 - May be fatal if swallowed and enters airways
 H317 - May cause an allergic skin reaction
 H332 - Harmful if inhaled
 H411 - Toxic to aquatic life with long lasting effects
 H315 - Causes skin irritation
 H319 - Causes serious eye irritation
 H226 - Flammable liquid and vapor

Precautionary Statements - EU (§28, 1272/2008)

P280 - Wear eye protection/face protection
 P301+ P310 - IF SWALLOWED: Immediately call a POISON CENTRE or doctor/physician
 P331 - Do NOT induce vomiting
 P273 - Avoid release to the environment
 P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
 P302+ P352 - IF ON SKIN: Wash with plenty of soap and water
 P280 - Wear protective gloves/protective clothing/eye protection/face protection
 P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
 P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking

Other Hazards

No information available.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	EC No.	Weight %	CAS-No	Classification	GHSCLAS	REACH Reg. No.
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3. COMPOSITION/INFORMATION ON INGREDIENTS

alpha.-Pinene	EEC No. 201-291-9	>95	80-56-8	R10 Xn; R20 Xi; R36/38 R43 N; R51-53 Xn; R65;	Asp. Tox. 1 (H304) Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) Skin Sens. 1 (H317) Acute Tox. 4 (H332) Aquatic Chronic 2 (H411)	
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For the full text of the R phrases mentioned in this Section, see Section 16

4. FIRST AID MEASURES

Description of first aid measures

Eye Contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes Obtain medical attention

Skin Contact

Wash off immediately with plenty of water for at least 15 minutes Obtain medical attention

Ingestion

Do not induce vomiting Call a physician or Poison Control Center immediately

Inhalation

Move to fresh air If breathing is difficult, give oxygen Do not use mouth-to-mouth resuscitation if victim ingested or inhaled the substance; induce artificial respiration with a respiratory medical device Immediate medical attention is required

Notes to Physician

Treat symptomatically

5. FIRE-FIGHTING MEASURES

Extinguishing media

Suitable Extinguishing Media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide Cool closed containers exposed to fire with water spray

Extinguishing media which must not be used for safety reasons

No information available.

Special hazards arising from the substance or mixture

Flammable Containers may explode when heated Vapors may form explosive mixtures with air Vapors may travel to source of ignition and flash back

Advice for fire-fighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear Thermal decomposition can lead to release of irritating gases and vapors

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Use personal protective equipment Remove all sources of ignition Take precautionary measures against static discharges

Environmental precautions

Should not be released into the environment

Methods and material for containment and cleaning up

Soak up with inert absorbent material Keep in suitable and closed containers for disposal Remove all sources of ignition Use spark-proof tools and explosion-proof equipment

7. HANDLING AND STORAGE**Precautions for Safe Handling**

Use only under a chemical fume hood Wear personal protective equipment Keep away from open flames, hot surfaces and sources of ignition Use only non-sparking tools Use explosion-proof equipment Do not breathe vapors or spray mist Do not get in eyes, on skin, or on clothing Do not ingest Take precautionary measures against static discharges

Conditions for safe storage, including any incompatibilities

Keep containers tightly closed in a dry, cool and well-ventilated place Keep away from heat and sources of ignition Flammables area

Specific End Uses**8. EXPOSURE CONTROLS / PERSONAL PROTECTION****Control parameters****Exposure limits****Component**

.alpha.-Pinene

European Union	The United Kingdom	France	Belgium	Spain
			TWA: 20 ppm	

Component

.alpha.-Pinene

Italy	Portugal	The Netherlands	Finland	Denmark
	TWA: 20 ppm			

Component

.alpha.-Pinene

Austria	Switzerland	Poland	Norway	Ireland
			TWA: 140 mg/m ³ TWA: 25 ppm	

Derived No Effect Level (DNEL)

No information available.

Predicted No Effect Concentration (PNEC)

No information available.

Exposure controls**Engineering Measures**

Use only under a chemical fume hood Ensure that eyewash stations and safety showers are close to the workstation location Use explosion-proof electrical/ventilating/lighting/equipment

Personal protective equipment**Eye Protection**

Safety glasses with side-shields

Hand Protection

Protective gloves

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

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice

Environmental exposure controls

No information available.

9. PHYSICAL AND CHEMICAL PROPERTIES

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Physical State	Liquid
Appearance	Colorless
odor	odorless
pH	No information available.
Vapor Pressure	5 mmHg @ 25 °C
Vapor Density	4.70
Viscosity	<7 mm ² /s at 40 °C
Boiling Point/Range	154 - 157°C / 309.2 - 314.6°F @ 760 mmHg
Melting Point/Range	-55°C / -67°F
Flash Point	38°C / 100.4°F
Explosion Limits	
Lower	0.8 vol%
Upper	6 vol%
Water Solubility	Insoluble
Specific Gravity	0.850
Molecular Formula	C ₁₀ H ₁₆
Molecular Weight	136.24

10. STABILITY AND REACTIVITY

Reactivity

Chemical Stability

Stable under normal conditions.

Possibility of Hazardous Reactions

Hazardous Polymerization

Hazardous polymerization does not occur.

Hazardous Reactions .

None under normal processing..

Conditions to Avoid

Incompatible products, Heat, flames and sparks.

Incompatible Materials

Strong oxidizing agents.

Hazardous Decomposition Products

Carbon monoxide (CO). Carbon dioxide (CO₂).

11. TOXICOLOGICAL INFORMATION

Information on Toxicological Effects

Acute Toxicity

Product Information

Product does not present an acute toxicity hazard based on known or supplied information

Component Information

Component

.alpha.-Pinene

LD50 Oral	LD50 Dermal	LC50 Inhalation
2100 mg/kg (Rat)	5000 mg/kg (Rat)	

Chronic Toxicity

Carcinogenicity

There are no known carcinogenic chemicals in this product

Sensitization	May cause sensitization by skin contact
Mutagenic Effects	No information available
Reproductive Effects	No information available.
Developmental Effects	No information available.
Target Organs	Respiratory system Eyes Skin
Other Adverse Effects	See actual entry in RTECS for complete information
Endocrine Disruptor Information	None known

12. ECOLOGICAL INFORMATION

Toxicity

Ecotoxicity effects Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
.alpha.-Pinene		0.28 mg/L LC50 96 h		EC50 = 41 mg/L 48h

Persistence and degradability

No information available

Bioaccumulative potential

No information available.

Component	log Pow
.alpha.-Pinene	4.1

Mobility in soil

No information available.

Results of PBT and vPvB assessment

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste from Residues / Unused Products

Dispose of in accordance with local regulations

Contaminated Packaging

Empty containers should be taken for local recycling, recovery or waste disposal

14. TRANSPORT INFORMATION

IMDG/IMO

UN-No	UN2368
Hazard Class	3
Packing Group	III
Proper Shipping Name	alpha-Pinene

ADR

UN-No	UN2368
Hazard Class	3
Packing Group	III

14. TRANSPORT INFORMATION

Proper Shipping Name alpha-Pinene

IATA

UN-No UN2368
Hazard Class 3
Packing Group III
Proper Shipping Name alpha-Pinene

15. REGULATORY INFORMATION

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

International Inventories

Component	EINECS	ELINCS	NLP	TSCA	DSL	NDSL	PICCS	ENCS	CHINA	AICS	KECL
alpha-Pinene	201-291-9	-		X	X	-	X	X	X	X	KE-34427 X

Legend

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

EINECS/ELINCS - European Inventory Lists

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

PICCS - Philippines Inventory of Chemicals and Chemical Substances

ENCS - Japan Existing and New Chemical Substances

CHINA - China Inventory of Existing Chemical Substances

AICS - Inventory of Chemical Substances

KECL - Existing and Evaluated Chemical Substances

Chemical Safety Assessment

16. OTHER INFORMATION

Text of R phrases mentioned in Section 2-3

R10 - Flammable

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Revision Date 10-Nov-2010

Revision Summary Not applicable

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

Disclaimer

The information provided on this SDS 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 guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text

End of Safety Data Sheet

