









Safety Data Sheet dated 5/7/2013, version 1

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

1.1. Product identifier

Product identification:

Trade name: JUNIPERBERRY ESSENTIAL OIL

 Trade code:
 OL.ES.170

 CAS number:
 8002-68-4

 EC number:
 283-268-3

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

1.3. Details of the supplier of the safety data sheet

Company: ESPERIS SPA

St. Ambrogio Binda 29 20143 MILANO (ITALY) Tel. +39 02 89122219

Competent person responsible for the safety data sheet:

info@esperis.it

1.4. Emergency telephone number

Antipoison Center - Hospital Name 1 - City - Telephone nbr. (availability information)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Directive criteria, 67/548/CE, 99/45/EC and following amendments thereof:

Properties / Symbols:

Xn Harmful

Xi Irritant

N Dangerous for the environment

R Phrases

R20/21/22 Harmful by inhalation, in contact with skin and if swallowed.

R36/38 Irritating to eyes and skin.

R43 May cause sensitization by skin contact.

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

R65 Harmful: may cause lung damage if swallowed.

EC regulation criteria 1272/2008 (CLP)

- Warning, Flam. Liq. 3, Flammable liquid and vapour.
- Danger, Asp. Tox. 1, May be fatal if swallowed and enters airways.
- Warning, Aquatic Chronic 1, Very toxic to aquatic life with long lasting effects.
- Warning, Skin Irrit. 2, Causes skin irritation.
- (1) Warning, Skin Sens. 1, May cause an allergic skin reaction.

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

Symbols:











Danger

Hazard statements:

H226 Flammable liquid and vapour.

H304 May be fatal if swallowed and enters airways.

H410 Very toxic to aquatic life with long lasting effects.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

Precautionary statements:

P210 Keep away from heat/sparks/open flames/hot surfaces. — No smoking.

P262 Do not get in eyes, on skin, or on clothing.

P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

P307+P311 IF exposed: Call a POISON CENTER or doctor/physician.

P501 Dispose of contents/container in accordance with applicable regulations.

Special Provisions:

None

Contents

alpha pinene

(R)-p-MENTHA-1,8-DIENE

2.3. Other hazards

vPvB Substances: None - PBT Substances: None

Other Hazards:

No other hazards

SECTION 3: Composition/information on ingredients

3.1. Substances

N.A.

3.2. Mixtures

Hazardous components within the meaning of EEC directive 67/548 and CLP regulation and related classification:

40% - 50% alpha PINENE

Xn,Xi,N; R10-20/21/22-36/38-43-51/53-65

2.6/3 Flam. Liq. 3 H226

3.10/1 Asp. Tox. 1 H304

3.3/2 Eye Irrit. 2 H319

3.2/2 Skin Irrit. 2 H315

(1) 3.4.2/1-1A-1B Skin Sens. 1, 1A, 1B H317

4.1/C2 Aquatic Chronic 2 H411

3.1/4/Oral Acute Tox. 4 H302



- 3.1/4/Dermal Acute Tox. 4 H312
- 3.1/4/Inhal Acute Tox. 4 H332

10% - 12.5% (R)-p-MENTHA-1,8-DIENE

Index number: 601-029-00-7, CAS: 5989-27-5, EC: 227-813-5

Xi,N; R10-38-43-50/53

- 2.6/3 Flam. Liq. 3 H226
- 3.2/2 Skin Irrit. 2 H315
- 3.4.2/1-1A-1B Skin Sens. 1, 1A, 1B H317
- 4.1/A1 Aquatic Acute 1 H400
- 4.1/C1 Aquatic Chronic 1 H410

3% - 5% beta PINENE

Xn,Xi,N; R10-20/21/22-36/38-43-51/53-65

- 2.6/3 Flam. Liq. 3 H226
- 3.10/1 Asp. Tox. 1 H304
- 3.3/2 Eye Irrit. 2 H319
- 3.2/2 Skin Irrit. 2 H315
- 3.4.2/1-1A-1B Skin Sens. 1, 1A, 1B H317
- 4.1/C2 Aquatic Chronic 2 H411
- 3.1/4/Oral Acute Tox. 4 H302
- 3.1/4/Dermal Acute Tox. 4 H312
- 3.1/4/Inhal Acute Tox. 4 H332

1% - 3% TERPINEOL

CAS: 98-55-5, EC: 202-680-6

Xi; R38

- 3.2/2 Skin Irrit. 2 H315
- (1) 3.3/2 Eye Irrit. 2 H319

SECTION 4: First aid measures

4.1. Description of first aid measures

OL.ES.170/1 Page n. 3 of 9 In case of skin contact:

Immediately take off all contaminated clothing.

Areas of the body that have - or are only even suspected of having - come into contact with the product must be rinsed immediately with plenty of running water and possibly with soap. Wash thoroughly the body (shower or bath).

Remove contaminated clothing immediatley and dispose off safely.

After contact with skin, wash immediately with soap and plenty of water.

In case of eyes contact:

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an opthalmologist immediately.

Protect uninjured eye.

In case of Ingestion:

Do NOT induce vomiting.

Give nothing to eat or drink.

In case of Inhalation:

If breathing is irregular or stopped, administer artificial respiration.

In case of inhalation, consult a doctor immediately and show him packing or label.

4.2. Most important symptoms and effects, both acute and delayed

None

4.3. Indication of any immediate medical attention and special treatment needed

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

Treatment:

None

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Water.

Carbon dioxide (CO2).

Extinguishing media which must not be used for safety reasons:

None in particular.

5.2. Special hazards arising from the substance or mixture

Do not inhale explosion and combustion gases.

Burning produces heavy smoke.

5.3. Advice for firefighters

Use suitable breathing apparatus.

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Move undamaged containers from immediate hazard area if it can be done safely.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment.

Wear breathing apparatus if exposed to vapours/dusts/aerosols.

Provide adequate ventilation.

Use appropriate respiratory protection.

See protective measures under point 7 and 8.

6.2. Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

Retain contaminated washing water and dispose it.

In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

Suitable material for taking up: absorbing material, organic, sand



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JUNIPERBERRY ESSENTIAL OIL

6.3. Methods and material for containment and cleaning up

Wash with plenty of water.

6.4. Reference to other sections

See also section 8 and 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid contact with skin and eyes, inhaltion of vapours and mists.

Use localized ventilation system.

Don't use empty container before they have been cleaned.

Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.

Contamined clothing should be changed before entering eating areas.

Do not eat or drink while working.

See also section 8 for recomened protective equipment.

7.2. Conditions for safe storage, including any incompatibilities

Keep away from food, drink and feed.

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Adequately ventilated premises.

7.3. Specific end use(s)

None in particular

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

alpha pinene

TLV TWA - 20 ppm, A4 - 111,25 mg/m3, A4 SEN

TLV STEL - A4 SEN

beta pinene

TLV TWA - 20 ppm, A4 - 111,25 mg/m3, A4 SEN

TLV STEL - A4 SEN

TERPINEOLO - CAS: 98-55-5

TLV TWA - n.a.

TLV STEL - n.a.

DNEL Exposure Limit Values

N.A.

PNEC Exposure Limit Values

N.A.

8.2. Exposure controls

Eye protection:

Use close fitting safety goggles, don't use eye lens.

Protection for skin:

Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton.

Protection for hands:

Use protective gloves that provides comprehensive protection, e.g. P.V.C., neoprene or rubber.

Respiratory protection:

Use adequate protective respiratory equipment.

Thermal Hazards:

None

Environmental exposure controls:

None



SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance and colour: liquid clear Odour: caratteristico

Odour threshold: N.A.
pH: N.A.
Melting point / freezing point: N.A.
Initial boiling point and boiling range: N.A.
Solid/gas flammability: N.A.

Upper/lower flammability or explosive limits: N.A.

Vapour density:

Flash point:

Evaporation rate:

Vapour pressure:

N.A.

N.A.

Relative density: 0.859 - 0.875
Solubility in water: insolubile
Solubility in oil: buona in etanolo
Partition coefficient (n-octanol/water): N.A.

Auto-ignition temperature: N.A.
Decomposition temperature: N.A.
Viscosity: N.A.
Explosive properties: N.A.
Oxidizing properties: N.A.

9.2. Other information

Miscibility: N.A. Fat Solubility: N.A. Conductivity: N.A.

Substance Groups relevant properties N.A.

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions

10.2. Chemical stability

Stable under normal conditions

10.3. Possibility of hazardous reactions

None

10.4. Conditions to avoid

Stable under normal conditions.

10.5. Incompatible materials

None in particular.

10.6. Hazardous decomposition products

None.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological information of the mixture:

JUNIPERBERRY ESSENTIAL OIL - CAS: 8002-68-4

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat = 6280 mg/kg

Toxicological information of the main substances found in the mixture:

TERPINEOL - CAS: 98-55-5

a) acute toxicity:



TERPINEOL - CAS: 98-55-5 DL50 orale, ratto 4300 mg/kg

If not differently specified, the information required in Regulation 453/2010/EC listed below must be considered as N.A.:

- a) acute toxicity;
- b) skin corrosion/irritation;
- c) serious eye damage/irritation;
- d) respiratory or skin sensitisation;
- e) germ cell mutagenicity;
- f) carcinogenicity;
- g) reproductive toxicity;
- h) STOT-single exposure;
- i) STOT-repeated exposure;
- j) aspiration hazard.



12.1. Toxicity

Adopt good working practices, so that the product is not released into the environment. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

12.2. Persistence and degradability

N.A.

12.3. Bioaccumulative potential

N.A.

12.4. Mobility in soil

N.A.

12.5. Results of PBT and vPvB assessment

vPvB Substances: None - PBT Substances: None

12.6. Other adverse effects

None

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Recover, if possible. Send to authorised disposal plants or for incineration under controlled conditions. In so doing, comply with the local and national regulations currently in force.

SECTION 14: Transport information

14.1. UN number

ADR-UN number: 1169
IATA-Un number: 1169
IMDG-Un number: 1169

14.2. UN proper shipping name

14.3. Transport hazard class(es)

ADR-Class: 3 IATA-Class: 3 IMDG-Class: 3

14.4. Packing group

ADR-Packing Group: III IATA-Packing group: III IMDG-Packing group: III

- 14.5. Environmental hazards
- 14.6. Special precautions for user
- 14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

N.A.

SECTION 15: Regulatory information

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

Dir. 67/548/EEC (Classification, packaging and labelling of dangerous substances)

Dir. 99/45/EC (Classification, packaging and labelling of dangerous preparations)

Dir. 98/24/EC (Risks related to chemical agents at work)

Dir. 2000/39/EC (Occupational exposure limit values)

Dir. 2006/8/EC

Regulation (EC) n. 1907/2006 (REACH)

Regulation (EC) n. 1272/2008 (CLP)

Regulation (EC) n. 790/2009 (ATP 1 CLP)

Regulation (EU) n. 453/2010 (Annex I)

Regulation (EU) n. 286/2011 (ATP 2 CLP)

Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:

None

Where applicable, refer to the following regulatory provisions:

Directive 2003/105/CE ('Activities linked to risks of serious accidents') and subsequent amendments.

Regulation (EC) nr 648/2004 (detergents).

1999/13/EC (VOC directive)

15.2. Chemical safety assessment

NΙΔ

SECTION 16: Other information

Full text of phrases referred to in Section 3:

R10 Flammable.

R20/21/22 Harmful by inhalation, in contact with skin and if swallowed.

R36/38 Irritating to eyes and skin.

R38 Irritating to skin.

R43 May cause sensitization by skin contact.

R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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

R65 Harmful: may cause lung damage if swallowed.

H226 Flammable liquid and vapour.

H304 May be fatal if swallowed and enters airways.

H319 Causes serious eye irritation.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H411 Toxic to aquatic life with long lasting effects.

H302 Harmful if swallowed.

H312 Harmful in contact with skin.

H332 Harmful if inhaled.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

This document was prepared by a competent person who has received appropriate training. Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities



SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold

CCNL - Appendix 1

Insert further consulted bibliography

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This MSDS cancels and replaces any preceding release.

ADR: European Agreement concerning the International Carriage of

Dangerous Goods by Road.

CAS: Chemical Abstracts Service (division of the American Chemical

Society).

CLP: Classification, Labeling, Packaging.

DNEL: Derived No Effect Level.

EINECS: European Inventory of Existing Commercial Chemical Substances.

GefStoffVO: Ordinance on Hazardous Substances, Germany.

GHS: Globally Harmonized System of Classification and Labeling of

Chemicals.

IATA: International Air Transport Association.

IATA-DGR: Dangerous Goods Regulation by the "International Air Transport

Association" (IATA).

ICAO: International Civil Aviation Organization.

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

(ICAO).

IMDG: International Maritime Code for Dangerous Goods.
INCI: International Nomenclature of Cosmetic Ingredients.

KSt: Explosion coefficient.

LC50: Lethal concentration, for 50 percent of test population.

LD50: Lethal dose, for 50 percent of test population.

LTE: Long-term exposure.

PNEC: Predicted No Effect Concentration.

RID: Regulation Concerning the International Transport of Dangerous Goods

by Rail.

STE: Short-term exposure.

STEL: Short Term Exposure limit.

STOT: Specific Target Organ Toxicity.

TLV: Threshold Limiting Value.

TWATLV: Threshold Limit Value for the Time Weighted Average 8 hour day.

(ACGIH Standard).

WGK: German Water Hazard Class.

N.A.: N.A.

N.D.: