

Date 16.11.2015 Version 1.0

According to EU Regulation 1907/2006 in the current version

#### **BALSAM FIR ESSENTIAL OIL**

# 1. Identification of the substance/preparation and trade name

Trade name: Balsam fir essential oil

Essential oil of ecologic Fir balsam from Canada

Utilization: aromatic raw material for cosmetic and professional use

Company identification: Elemental SRL, Piata Cazarmii no.15, 410188-Oradea, Bihor-Romania,

Tel/Fax: +40259-436.755, www.elemental.eu

Emergency: RO: Biroul pentru Regulamentul Sanitar Internațional și Informare Toxicologică - Telefon

de urgență 021 318 3606

#### 2. Hazards Identification

2.1 Classification of the substance

Classification according to Regulation (EC) No 1272/2008

Hazard statements:

H226: Flammable liquid and vapour. H304: May be fatal if swallowed and enters airways. H317: May cause an allergic skin reaction. H319: Causes serious eye irritation. H410: Very toxic to aquatic life with long lasting effects

Classification according to 67/548/EEC and 1999/45/EC

N: Dangerous for the environment. Xn: Harmful

Risk statements:

R10: Flammable. R43: May cause sensitization by skin contact. R50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. R65: Harmful: May cause lung damage if swallowed.

Safety statements:

S24: Avoid contact with skin. S37: Wear suitable gloves. S61: Avoid release to the environment. Refer to special instructions / Safety Data Sheets. S62: If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

2.2 Label elementsSignal word: Danger

Labelling:







GHS02: Flammable. GHS07: Acute toxicity, irritation, dermal sensitizer, narcotic effects

GHS08: Health hazards. GHS09: Hazardous to aquatic environment

Hazard statements:

H226: Flammable liquid and vapour. H304: May be fatal if swallowed and enters airways. H317: May cause an allergic skin reaction. H319: Causes serious eye irritation. H410: Very toxic to aquatic life with long lasting effects.

Precautionary statements:

P210: Keep away from heat/sparks/open flames/hot surfaces – No smoking. P273: Avoid release to the environment P280: Wear protective gloves/protective clothing/eye protection/face protection. P301+310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. P302+352: IF ON SKIN: Wash with soap and water. P501: Dispose of contents/container according to local regulations.

2.3 Other hazards

CMR components: none (methylchavicol : estragole  $\leq$  0.1%, methyleugenol  $\leq$  0.1%)

Allergens: d-limonene ( $\leq 10\%$ ), linalool ( $\leq 0.5\%$ ), citral : neral+geranial ( $\leq 0.2\%$ ), citronellol ( $\leq 0.2\%$ ), geraniol ( $\leq 0.2\%$ )

### 3. Composition / Information on ingredients



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Pure and natural essential oil. Main constituents: beta-pinene (28 to 38%), alpha-pinene (9 to 19%), delta-3-carene (1 to 17%), bornyl acetate (5 to 12%), d-limonene (5 to 10%)

Hazardous components naturaly present:

Constituent Name CAS # EINECS # Concentration %

Alpha-Pinene 80-56-8 201-291-9 ≤ 19%

Alpha-Terpineol 98-55-5 202-680-6 ≤ 3%

Beta-Phellandrene 555-10-2 209-081-9 ≤ 9%

Beta-Pinene 127-91-3 204-872-5 ≤ 38%

Bornyl acetate 76-49-3 227-101-4 ≤ 12%

Camphene 79-92-5 201-234-8 ≤ 8%

Delta-3-Carene 13466-78-9 236-719-3 ≤ 17%

D-Limonene 5989-27-5 227-813-5 ≤ 10%

Myrcene 123-35-3 204-622-5  $\leq$  4%

Terpinolene 586-62-9 209-578-0 ≤ 3%

#### Classification:

Constituent name, Labelling, Risk statements, Hazard statements, Signal word

Alpha-Pinene: GHS02, GHS07, GHS08, GHS09 Xn, N, R10, R43, R50/53, R65 H226, H304, H317, H410 Danger

Alpha-Terpineol: GHS07 Xi, R36/37/38 H315, H319 Warning

Beta-Phellandrene: GHS02, GHS08 Xn, R10, R65 H226, H304 Danger

Beta-Pinene: GHS02, GHS07, GHS08, GHS09 Xn, N, R10, R43, R50/53, R65 H226, H304, H317, H410 Danger

Bornyl acetate: GHS07 Xi, R36/37/38 H315, H319, H335 Warning

Camphene: GHS02, GHS07, GHS09 N, Xi, R10, R36, R50/53 H228, H319, H410 Warning

Delta-3-Carene: GHS02, GHS07, GHS08 N, Xn, R10, R43, R51/53, R65 H226, H304, H317, H411 Danger

D-Limonene: GHS02, GHS07, GHS08, GHS09 Xi, N, R10, R38, R43, R50/53 H226, H304, H315, H317, H410 Danger

Myrcene: GHS02, GHS08 Xn, R52/53, R65 H226, H304, H412 Danger

Terpinolene: GHS02, GHS08, GHS09 N, Xn, R51/53, R65 H226, H304, H411 Danger

### 4. First Aid

After excessive inhalation: Move exposed person to fresh air. Keep the person warm and at rest. Call a doctor in case

of persistence or worsening of adverse health effects. If unconscious, place the person in

recovery position and call a physician immediately. Ensure good air circulation.

First aid after Skin contact: Remove contamined clothing. Rinse affected area with plenty of water. Contact a physician

if symptoms persist.

First aid after Eye contact: Immediately flush eyes with plenty of water, occasionally lifting the upper and

lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 15

minutes. Get medical attention if irritation occurs.

First aid after Ingestion: Rinse mouth with water. Move exposed person to fresh air. Keep the person warm and at

rest. Do not induce vomiting unless directed by medical personnel. If vomiting occurs, keep

head down to prevent the passage of vomit into the lungs. Call a doctor in case of persistence or worsening of adverse health effects. If unconscious, place the person in

recovery position and call a physician immediately. Ensure good air circulation.

### 5. Fire-fighting Measures



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Suitable extinguishing media: Foam, dry chemical powder, carbon dioxide, sand or earth

Unsuitable extinguishing Direct waterjet

Special protective equipment Avoid vapour inhalation. Keep away from sources of ignition. Do not smoke. Wear positive

pressure self-contained breathing apparatus & protective clothing.

Fire and explosion protection Avoid open flames. Toxic vapours must be avoid during fire. Respiratory protection should

be released during fire.

Other information Closed containers may build up pressure when exposed to heat and should be cooled with

water spray.

#### 6. Accidental release measures:

Personal precautions: Provide adequate ventilation, avoid contact with skin and eye contact. Use individual

protective equipment (safety glasses, waterproof-boots, suitable protective clothing). Don't

smoke. Prevent any contact with hot surfaces (see rubric 8).

**Environmental precautions** 

Land spill:

Shut off source. Prevent product from entering sewerage, water courses or low

lying areas. Take measures to reduce or prevent effects on ground water. Gather product mechanically if possible. Bind remainings of the product with

sand or other appropriate absorbent and remove. Dispose of product and contaminated

absorbents in suitable containers, as directed in section 13.

Water spill: Confine the spill immediately with booms. Warn other ships. Notify port and

other relevant authorities. Remove from the surface by skimming or with suitable absorbents. In running waters, apply appropriate dispersants in accordance

with local regulation.

Methods for cleaning up: Contain spilled material, cover with an inert, non-combustible, inorganic, absorbent

material and destroy according to the regulation in force.

## 7. Handling and Storage

Precautions for safe handling: Handle with care. Do not ingest the product. Use only in well ventilated area. To avoid

splashing into the eyes and mucous membranes and following the arrangement of the workplace and manipulations, wearing glasses and special clothing (gloves...) may be indicated. It is prohibit smoking in areas where they are handled. Do not heat with a naked

flame or expose their vapors to a flame or other sources of ignition (eg electrical

equipment). Do not abundantly breathe vapors. Large spillages should be contained with

sand or inert powder.

Conditions for safe storage: Store in cool, dry and ventilated area, away from heat sources, sparks and open flames,

protected from light in tightly closed original container

### 8. Exposure Controls and Personal Protection

Respiratory protection: Avoid to breath directly on the product. Ensure a good ventilation of the workroom.

Hand protection: Use protective gloves (according to EN374 regulation).

Eye protection: Avoid contact with eyes. Use eye protectors designed to protect against liquid splashes

Before handling, wear safety glases in accordance with standard EN166.

Physical protection: Use individual protective equipment









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### 9. Physical and Chemical Properties

Appearance: liquid at room temperature Colour: colorless to light yellow

Odour: typical Flash point: +43°C

Specific gravity at 20°C: 0.865 to 0.885 Refractive index at 20°C: 1.472 to 1.480 Optical rotation at 20°C: -30° to -15°

Solubility(ies): insoluble in water; soluble in ethanol., liposoluble

### 10. Stability and Reactivity

Stability: No significant modifications, respecting the storage conditions (see rubric 7).

Reactivity: This product is stable to shock, vibration and pressure under normal conditions of use. In

the presence of light and heat, oxidation can occur.

Conditions to avoid: Do not heat to high temperature. Do not expose sealed containers in the sun. Keep away

from sources of ignition.

Substances to avoid: Avoid contacts with strong acids, alkali or oxidizing agents.

## 11. Toxicological Information

LD oral  $50 \ge 5000 \text{ mg/kg}$ Effect by ingestion: LD dermal 50 ≥ 5000 mg/kg Effect by dermal contact:

none (methylchavicol : estragole  $\leq$  0.1%, methyleugenol  $\leq$  0.1%) CMR naturally present

IFRA restrictions: Balsam Fir essential oil is not explicitly regulated by IFRA. It contains components that may

be regulated by IFRA.

## 12. Ecological Information

Prevent contamination of soil, ground and surfacewater. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Biodegradability not determined.

### 13. Disposal Considerations

Recommendation: In accordance with local environmental laws. Avoid disposing into drainage systems and

into the environment.

## 14. Transport Information

UN no: 1169

Road (ADR/RID): UN 1169 Extracts, aromatic, liquid, 3, III Air (IATA/ICAO): UN 1169 Extracts, aromatic, liquid, 3, III Sea (IMDG): UN 1169 Extracts, aromatic, liquid, 3, III

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## 15. Additional Regulatory Information

Classification according to 67/548/EEC and 1999/45/EC

N: Dangerous for the environment. Xn: Harmful.

Risk statements:

R10: Flammable. R43: May cause sensitization by skin contact. R50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. R65: Harmful: May cause lung damage if swallowed.

Safety statements:

S24: Avoid contact with skin. S37: Wear suitable gloves. S61: Avoid release to the environment. S62: If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

## 16. Other Information

#### **DECLARATION OF ALLERGENS**

7th Amendment to Directive 76/768/EC, annex III, part I (2003/15/EC)

INCI Name	CAS No	Typical Contents in %
2-(TERT-BUTYL PROPIONALDE) (Lilial)	80-54-6	0
3-METHYL-4-(2,6,6 TRIMETHYL-2-CYCLOHEXINE-1-YL)-3-BUTEN-2-ONE	127-51-5	0
AMYL CINNAMAL	122-40-7	0
AMYL CINNAMYL ALCOHOL	101-85-9	0
ANISYL ALCOHOL (Anise alcohol)	105-13-5	0
BENZYL ALCOHOL	100-51-6	0
BENZYL BENZOATE	120-51-4	0
BENZYL CINNAMATE	103-41-3	0
BENZYL SALICYLATE	118-58-1	0
CINNAMAL (Cinnamic Aldehyde)	104-55-2	0
CINNAMYL ALCOHOL	104-51-6	0
CITRAL	5392-40-5	<=0,2
CITRONELLOL	106-22-9	<=0,2
COUMARIN	91-64-5	0
EUGENOL	97-53-0	0
FARNESOL	4602-84-0	0
GERANIOL	106-24-1	<=0,2
HEXYL CINNAMIC ALDEHYDE (Hexyl Cinnamal)	101-86-0	0
HYDROXYCITRONELLAL	107-75-5	0
HYDROXYMETHYL PENTYL CYCLOHEXENE CARBOXALDEHYDE (Lyral)	31906-04-4	0
ISO EUGENOL	97-54-1	0
LIMONENE	138-86-3	<=10,0
LINALOOL	78-70-6	<=0,5
METHYL HEPTINE CARBONATE	111-12-6	0
OAK MOSS EXTRACT (Evernia Prunastri)	90028-68-5	0
TREE MOSS EXTRACT (Evernia Furfuracea)	90028-67-4	0

### Disclaimer

This material safety data sheet does not constitute a guarantee of the properties of the product and is not a contractual



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legal report. The information is given in good faith on the basis of our best knowledge of the product at the indicated time. However, we cannot accept responsibility or liability for any consequences arising from its use, no warranty for correctness and completeness is given. We caution the users against the incurred possible risks when the product is used at other ends than the use for which it was initially planned. It is the user's responsibility during handling, storage and product use to consult the main regulatory texts in force regarding workers and environment protection.