

Material Safety Data Sheet / MSDS (I907/2006/EC Article 31)

PALMAROSA ORGANIC ESSENTIAL OIL

VERSION I: 20.9.2024

SECTION 01:

IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 PRODUCT IDENTIFIER

ORIGIN:	India
PRODUCT'S NAME:	Palmarosa organic essential oil
INCI NAME:	Cymbopogon martinii oil
BOTANICAL NAME:	Cymbopogon martinii
CAS Number:	8014-19-5
EC Number:	283-461-2 ; 294-453-3
EINECS CAS Number:	84649-81-0 ; 91722-54-2

1.2 RELEVANT IDENTIFIED USES OF THE SUBSTANCE OR MIXTURE AND USES ADVISED AGAINST

Application of the substance:

- Flavouring agent
- Cosmetic ingredient
- Aromatherapy use

1.3 DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET

SUPPLIER:	BOHDEI d.o.o.
ADDRESS:	Pavlova vas 66 8255 Pisece Slovenia, EU
E-MAIL:	info@amonanis.si
TELEPHONE:	+386 70 184 666

1.4 EMERGENCY TELEPHONE NUMBER

+386 70 184 666

SECTION 02: HAZARDS IDENTIFICATION

2.1 CLASSIFICATION OF THE SUBSTANCE OR MIXTURE (Classification according to Regulation (EC) No 1272/2008)

Skin corrosion/irritation, category 2, H315
Skin sensitisation, category 1, H317
Serious eye damage/eye irritation, category 1, H318
Hazardous to the aquatic environment, chronic, category 3, H412

2.2 LABEL ELEMENTS (Labelling according to Regulation (EC) No 1272/2008)

Pictograms:



Signal word: Danger

Hazard statements:

H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H412 Harmful to aquatic life with long lasting effects.

Precautionary statements:

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P264 Wash hands thoroughly after handling.
P272 Contaminated work clothing should not be allowed out of the workplace.
P273 Avoid release to the environment.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P310 Immediately call a POISON CENTER or doctor/physician.
P321 Specific treatment (see section 4 of the safety data sheet).
P302+352 IF ON SKIN: wash with plenty of soap and water.
P305+351+338 IF IN EYES: rinse continuously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
P332+313 If skin irritation occurs: get medical advice/attention.
P333+313 If skin irritation or rash occurs: get medical advice/attention.
P362+364 Take off contaminated clothing and wash before reuse.
P501 Dispose of contents/container in accordance with local regulations.

2.3 OTHER HAZARDS

No data available.

SECTION 03: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 SUBSTANCES

NCS (natural complex substance): 100% pure and natural essential oil

List of principal components:

Name of component	CAS Number	EINECS Number	% composition	Classification Regulation (EC) No 1272/2008
Geraniol	106-24-1	203-377-1	70 - 87	H315, H317, H318
Geranyl acetate	105-87-3	203-341-5	5 - 15	H315, H317, H412
Linalool	78-70-6	201-134-4	1 - 3	H315, H317, H319
Trans-beta-Ocimene	13877-91-3	237-641-2	0.4 - 2.5	H226, H304, H315, H400, H411
cis-beta-Ocimene	3338-55-4	222-081-3	0.2 - 2.5	H226, H304, H315, H400, H411
Beta-Caryophyllene	87-44-5	201-746-1	1 - 2	H304, H317
Farnesol	4602-84-0	225-004-1	0.3 - 2	H315, H317, H319, H400, H410
Geranial (= E-Citral)	141-27-5	205-476-5	0 - 1.5	H315, H317, H319
Myrcene	123-35-3	204-622-5	0.1 - 1.5	H226, H304, H315, H319, H400, H411

SECTION 04:

FIRST AID MEASURES

4.1 DESCRIPTION OF FIRST AID MEASURES

General information:	Symptoms of poisoning may even occur after several hours, therefore medical observation for at least 48 hours after the accident. Seek immediate medical advice. Never give anything by mouth to an unconscious person. It is recommended that those who provide first aid have a personal protective equipment. No action shall be taken involving any personal risk or without suitable training.
After inhalation:	Supply fresh air. Do not administer anything orally. If unconscious, place them in a suitable position. Seek medical assistance.
After skin contact:	Remove contaminated clothing. Immediately wash with water and soap and rinse thoroughly. If skin irritation continues, consult a doctor.
After eye contact:	Check for and remove any contact lenses. Rinse opened eyes for at least 10 minutes under running water while pulling eyelids up. Don't let the person to rub the affected eye. If symptoms persist, consult a doctor.
After swallowing:	Rinse mouth thoroughly with water. Do not induce vomiting. If vomiting occurs, keep head down to prevent the passage of vomit into the lungs. Move exposed person to fresh air. If unconscious, place them in a suitable position. Seek medical assistance.

4.2 MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED

Causes skin irritation.
May cause an allergic skin reaction.
Causes serious eye damage.

4.3 INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED

Get medical attention if any discomfort is felt, and bring these instructions.

SECTION 05:

FIREFIGHTING MEASURES

5.1 EXTINGUISHING MEDIA

Suitable extinguishing agents:

Suitable extinguishing agents:

CO₂, sand, foam, extinguishing powder.

Unsuitable extinguishing agents:

Water with full jet or fog (spray).

5.2 SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE

Nature of decomposition of the product is not known. Formation of toxic gases is possible during heating or in case of fire.

5.3 ADVICE FOR FIREFIGHTERS

Standard procedure for chemical fires.

Spray extinguishing media to base of flames.

Fire precautions:

Evacuate the area.

Container may explode in the heat of a fire.

Cool endangered receptacles with water spray. Take wind direction into account.

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

Protective equipment:

Do not intervene without suitable protective equipment.

Use full face, self-contained breathing apparatus.

Full body protection.

SECTION 06:

ACCIDENTAL RELEASE MEASURES

6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

For first aiders:

Wear protective equipment.

Ensure adequate ventilation.

Plug the leak if it is safe to do so.

Keep away from ignition sources.

Keep unprotected persons away.

For non-rescuers:

Ventilate the spill area.

Avoid contact with skin and eyes.

Avoid inhalation of gases, vapours or smoke.

Do not smoke.

6.2 ENVIRONMENTAL PRECAUTIONS

Do not allow product to reach sewage system or any water course.

Inform respective authorities in case of seepage into water course or sewage system.

6.3 METHODS AND MATERIAL FOR CONTAINMENT AND CLEANING UP

Dispose contaminated material as waste according to item I3.

Ensure adequate ventilation.

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

6.4 REFERENCE TO OTHER SECTIONS

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

SECTION 07:

HANDLING AND STORAGE

7.1 PRECAUTIONS FOR SAFE HANDLING

Individual precautions

Apply good manufacturing practice and industrial hygiene practices.

Do not eat, drink or smoke while handling.

Avoid contact with skin and eyes.

Do not inhale the vapors, do not swallow.

Prevent access to persons not required.

Wear personal protective equipment.

Wash your hands after any manipulation.

Contaminated work clothes should not leave the workplace.

Packaging precautions

Store in original container or other container approved alternative made from a compatible material.

Keep receptacles tightly sealed when not in use.

Avoid spills.

Empty containers retain residue product.

Keep away from heat, sparks, open flame and direct sunlight.

Do not use tools that can cause sparks.

Avoid exposing to high temperatures during processing.

Handle with care. Avoid jolting, friction and impact.

Working area protection

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

Protect against electrostatic charges.

Electrical equipment has to be protected according to applicable standards.

Avoid release to the environment.

Use appropriate container to avoid environmental contamination.

7.2 CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES

Storage requirements to be met by storerooms and receptacles:

Store only in the original receptacle.

Use only receptacles specifically permitted for this substance/ product. Avoid PVC.

Once the containers are open, they must be carefully closed and placed vertically to prevent spills.

Keep container tightly sealed.

Store the containers between 5 and 25° C in a dry and dark place.

Protect from heat and direct sunlight.

Do not smoke near the product.

Store receptacle in a well ventilated area.

Keep away from oxidising agents and from highly acidic or alkaline materials.

Information about storage in one common storage facility:

Not required.

7.3 SPECIFIC END USE(S)
No data available.

SECTION 08: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 CONTROL PARAMETERS

Ingredients with limit values that require monitoring at the workplace:
Not required.

8.2 EXPOSURE CONTROLS



General protective and hygienic measures:	The usual precautionary measures are to be adhered to when handling chemicals. Ensure good ventilation of the working area. Provide eyewash station. Avoid static discharges in working area. Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing Wash hands before breaks and at the end of work. Do not inhale gases / fumes / aerosols. Do not inhale dust / smoke / mist. Avoid contact with the skin. Avoid contact with the eyes.
Respiratory protection:	Avoid breathing vapors. Use suitable respiratory protective device in case of insufficient ventilation. Wear full face mask supplied with gas cartridge suitable for organic substances (Filter A2 type).
Protection of hands:	Avoid skin contact. Wear suitable protective gloves resistant to chemical agents in accordance with standard EN374. The glove material has to be impermeable and resistant to the product / the substance / the preparation. Type of gloves recommended Nitrile rubber or PVA (Polyvinyl alcohol).
Skin protection:	Wear apron or protective clothing in case of splashes.
Eye/face protection:	Avoid contact with eyes. Wear approved safety goggles with built in frame tested to EN166.
Body protection:	Impervious protective clothing. Boots.
Environmental exposure control:	Avoid release into the environment.

SECTION 09: PHYSICAL AND CHEMICAL PROPERTIES

9.1 INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

GENERAL INFORMATION	
PHYSICAL STATE:	Liquid
COLOUR:	Pale yellow
ODOUR:	Sweet, floral, rose-like
ODOUR THRESHOLD:	Not determined
BOILING POINT OR INITIAL BOILING POINT AND BOILING RANGE:	114 – 230°C at 1 008hPa
FLAMMABILITY:	Non flammable
LOWER AND UPPER EXPLOSION LIMIT:	Non-explosive
FLASH POINT:	89°C (closed cup)
DECOMPOSITION TEMPERATURE:	Not determined
PH:	Neutral
VISCOSITY:	8.2mPa.s at 20°C
DYNAMIC:	Not determined
SOLUBILITY WATER:	100mg/L at 25°C
PARTITION COEFFICIENT N-OCTANOL/WATER (LOG VALUE)	Not determined
VAPOUR PRESSURE:	0.008 – 100Pa at 20 – 70.58°C
DENSITY AND/OR RELATIVE DENSITY:	0.880 – 0.894
AUTO-IGNITION TEMPERATURE:	250°C at 100.2 – 101.8kPa
OXIDISING PROPERTIES:	No
OPTICAL ROTATION (20°C):	-1° to +3°
REFRACTIVE INDEX (20°C):	1.469 – 1.478

9.2 OTHER INFORMATION

No data available.

SECTION 10:**STABILITY AND REACTIVITY****10.1 REACTIVITY**

Stable under recommended storage conditions.

10.2 CHEMICAL STABILITY

Stable under recommended storage conditions.

10.3 POSSIBILITY OF HAZARDOUS REACTIONS

No data available.

10.4 CONDITIONS TO AVOID

None.

10.5 INCOMPATIBLE MATERIALS

No data available.

10.6 HAZARDOUS DECOMPOSITION PRODUCTS

No data available.

SECTION 11:**TOXICOLOGICAL INFORMATION**

II.1 INFORMATION ON HAZARD CLASSES AS DEFINED IN REGULATION (EC) NO 1272/2008

Acute toxicity:

Oral: LD50 3600 mg/kg bw (rat). Practically nontoxic.
Dermal: LD50 5000 mg/kg bw (rat). Practically nontoxic.

Irritation:

Skin: Adverse effect observed (irritating)
Eye: Adverse effect observed (irritating)

Sensitisation:

Adverse effect observed (sensitizing)

Repeated dose toxicity:

Oral: NOEL (rat): 550 mg/kg bw/day. NOEL (rat): 10000 ppm.
Dermal: NOAEL (rat): 300 mg/kg bw/day.

Reproductive toxicity:

No data available.

STOT-single exposure:

No data available.

STOT-repeated exposure:

No data available.

Aspiration hazard:

No data available.

Subacute to chronic toxicity:

No data available.

Photo-toxicity:

No data available.

II.2 INFORMATION ON OTHER HAZARDS

No data available.

SECTION I2:

ECOLOGICAL INFORMATION

I2.1 TOXICITY

Short-term toxicity to fish:

LC50 (4 days): 22 mg/L
LC0 (4 days): 10 mg/L
LC100 (4 days): 46.4 mg/L
NOEC (4 days): 10 mg/L

Short-term toxicity to aquatic invertebrates:

EC50 (48h): 10.8 mg/L
EC0 (48h): 4 mg/L
EC100 (48h): 41.9 mg/L

Toxicity to aquatic algae and cyanobacteria:

EC50 (72h): 13.1 mg/L

NOEC (72h): 1 mg/L

EC10 (72h): 3.77 mg/L

Toxicity to microorganisms:

EC50 (30 min): 70 mg/L

12.2 PERSISTENCE AND DEGRADABILITY

Readily biodegradable (100%).

12.3 BIOACCUMULATIVE POTENTIAL

No data available.

12.4 MOBILITY IN SOIL

No data available.

12.5 RESULTS OF PBT AND VPvB ASSESSMENT

The substance is not PBT/vPvB.

12.6 ENDOCRINE DISRUPTING PROPERTIES

No data available.

12.7 OTHER ADVERSE EFFECTS

Predicted No-Effect Concentration (PNEC): The Predicted No-Effect Concentration (PNEC) value is the concentration if a substance below which adverse effects in the environment are not expected to occur.

Hazard for Aquatic Organisms:

Freshwater: 10.8 µg/L

Intermittent releases (freshwater): 108 µg/L

Marine water: 1.08 µg/L

Intermittent releases (marine water): No data available: testing technically not feasible.

Sewage treatment plant (STP): 700 µg/L

Sediment (freshwater): 115 µg/kg sediment dw

Sediment (marine water): 11.5 µg/kg sediment dw

Hazard for Air:

Air: no hazard identified.

Hazard for Terrestrial Organism

Soil: 16.7 µg/kg soil dw

Hazard for Predators:

Secondary poisoning: No potential to cause toxic effects if accumulated (in higher organisms) via the food chain.

SECTION 13:**Disposal considerations****13.1 WASTE TREATMENT METHODS****Recommendation:**

Must be specially treated adhering to official regulations.

Uncleaned packaging:

Disposal must be made according to official regulations.

SECTION I4:**TRANSPORT INFORMATION**

Land: Transport by road: ADR, Transport by rail: RID.

Transport documentation: Consignment note and written instructions.

Sea: Transport by ship: IMDG.

Transport documentation: Bill of lading.

Air: Transport by plane: ICAO/IATA.

Transport document: Airway bill.

I4.1 UN NUMBER OR ID NUMBER

ADR/ADN/RID: not regulated

IMDG: not regulated

ICAO/IATA: not regulated

I4.2 UN PROPER SHIPPING NAME

ADR/ADN/RID: not regulated

IMDG: not regulated

ICAO/IATA: not regulated

I4.3 TRANSPORT HAZARD CLASS(ES)

ADR/ADN/RID: not regulated

IMDG: not regulated

ICAO/IATA: not regulated

I4.4 PACKING GROUP

ADR/ADN/RID: not regulated

IMDG: not regulated

ICAO/IATA: not regulated

I4.5 ENVIRONMENTAL HAZARDS

Harmful to aquatic life with long lasting effects.

I4.6 SPECIAL PRECAUTIONS FOR USER

No data available.

I4.7 MARITIME TRANSPORT IN BULK ACCORDING TO IMO INSTRUMENTS

No data available.

II.2 INFORMATION ON OTHER HAZARDS

No data available.

SECTION I5:**REGULATORY INFORMATION**

I5.1 SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS/LEGISLATION SPECIFIC FOR THE SUBSTANCE OR MIXTURE

No data available.

I5.2 CHEMICAL SAFETY ASSESSMENT:

No data available.

SECTION I6: OTHER INFORMATION

The information in this safety data sheet is based on the state of our knowledge at the date indicated. The information in this sheet must be regarded as a description of the safety requirements for the product, they are not to be considered a warranty or quality specification and have no contractual value on properties and application areas thereof. The information contained in this safety data sheet relate to the specific material designated and may not be valid with respect to the product associated with another product or process, unless it is specified in the text of this document. The required information complies with EU regulations in force. It does not exempt the user from knowing and applying all the national regulations in force.

Relevant phrases:

H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H412 Harmful to aquatic life with long lasting effects.

Training hints:

Minimum training in occupational risk prevention is recommended for personnel who will handle this product, in the purpose of facilitating the understanding and interpretation of this form of safety data in the same way as the labeling of the product.

Abbreviations and acronyms:

IFRA: International Fragrance Association
IOFI: International Organization of the Flavor Industry
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
DOT: US Department of Transportation
IATA: International Air Transport Association
ICAO: International Civil Aviation Organisation
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative

Sources:

IFRA/IOFI Labelling Manual, REACH registration dossier, supplier information