

Material Safety Data Sheet

According to EU Regulation 1907/2006 and 2020/878 in the current version

MANDARIN RED ESSENTIAL OIL

1. Identification of the substance/mixture and company

Trade name:	Mandarin Red Essential Oil
INCI	Citrus Reticulata Peel Oil
Utilization:	Raw material for personal care, aromatherapy
Supplier company identification:	Elemental SRL, Piața Cazărmii no.15, 410188-Oradea, jud.Bihor, Romania Tel/Fax: +40259-436.755, www.ellemental.com
Emergency:	RO: număr național pentru cazuri de urgență: 021 3183606 Institutul de Sănătate Publică București. International emergency number: +49 180 2273-112

2. Hazards Identification

2.1. Classification of the substance or mixture: Flammable Liquids - Category 3 - H226 Skin Irritant - Category 2 - H315 Skin sensitizer - Category 1B - H317 Toxic to reproduction - Category 2 - H361 Aspiration hazard - Category 1 - H304 Hazardous to the aquatic environment, short-term (acute) - Category 1 - H400 Hazardous to the aquatic environment, long-term (chronic) - Category 2 - H411. 2. Label Elements: Hazard pictograms: Signal Word: Danger Hazard statements: 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. H361 – Suspected of damaging fertility or the unborn child. H410 – Very toxic to aquatic life with long lasting effects. Precautionary statements: P210 – Keep away from heat/sparks/open flames/hot surfaces. — No smoking. P261 – Avoid breathing dust/fume/gas/mist/vapours/spray. P280 – Wear protective gloves/protective clothing/eye protection/face protection. P301+P310+P331 – IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Do NOT induce vomiting. P302+P352+P333+P313 – IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention.

2.2 Label elements
Signal word: DANGER



Hazard statements: 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. H361 – Suspected of damaging fertility or the unborn child. H410 – Very toxic to aquatic life with long lasting effects. Precautionary statements: P210 – Keep away from heat/sparks/open flames/hot surfaces. — No smoking. P261 – Avoid breathing dust/fume/gas/mist/vapours/spray. P280 – Wear protective gloves/protective clothing/eye protection/face protection. P301+P310+P331 – IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Do NOT induce vomiting. P302+P352+P333+P313 – IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention.

2.3 other hazards

Adverse physio-chemical properties

No data adverse effects on human health no data. Pbt or vpvb according to annex xiii no data

3. Declaration of ingredients

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3.1 Substances

Chemical name: MANDARIN OIL

CAS number: 84929-38-4

EC number: 284-521-0

Limonene N°CAS : 138-86-3 N°CE : 205-341-0 65.0 - 77.0%

Xi, N R10-38-43-50/53 SGH07, SGH08, SGH09, SGH02 H304, 315, 317, 410, 226 AH 1, SCI 2, SS 1B, EH A1, C1, FL 3

alpha-Pinene N°CAS : 80-56-8 N°CE : 201-291-9 < 3.0%

Xn R(10)-38-43-65 SGH02, SGH07, SGH08 H226-303-304-315-317 FL 3, ATO 5(3700), SCI 2, SS 1B, AH 1

beta-Pinene N°CAS : 127-91-3 N°CE : 204-872-5 < 2.0%

Xn R(10)-38-43-65 SGH02, SGH07, SGH08 H226-304-315-317 FL 3, SCI 2, SS 1B, AH 1

Myrcene N°CAS : 123-35-3 N°CE : 204-622-5 < 2.0%

Xn R(10)-65-38 SGH08, SGH02, SGH07 H304, 319, 226, 315 FL 3, AH 1, SCI 2, EDI 2A

gamma-Terpinene N°CAS : 99-85-4 N°CE : 202-794-6 18%

Xn R(10)-65 SGH02, SGH08 H226-303-316-304 FL 3, ATO 5(3850), SCI 3, AH 1

3.2 Mixtures

Not applicable

4. First aid measures

4.1. Description of necessary first aid measures

Ingestion: Rinse mouth with water. Obtain medical advice. Keep at rest. Do not induce vomiting.

Eye contact: In case of contact with eyes, rinse immediately with plenty of water for at least 15 minutes and seek medical advice.

Inhalation: Remove person to fresh air and keep at rest. Seek immediate medical advice.

Skin contact: Take off immediately all contaminated clothing. Thoroughly wash affected skin with soap and water. Seek medical attention if symptoms persist.

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

No information available.

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

No information available

5. Fire fighting measures

5.1 Extinguishing media

Water spray, carbon dioxide, dry chemical powder or appropriate foam. For safety reasons do not use full water jet.

5.2. Special hazards arising from the substance or mixture Known or Anticipated Hazardous Products of Combustion:

Emits toxic fumes under fire conditions.

5.3. Advice for firefighters High temperatures can lead to high pressures inside closed containers. Avoid inhalation of vapors that are created. Use appropriate respiratory protection. Do not allow spillage of fire to be poured into drains or watercourses. Wear self-contained breathing apparatus and protective clothing

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6. Accidental release measures

- 6.1. Personal precautions, protective equipment and emergency procedures Evacuate surrounding areas. Ensure adequate ventilation. Keep unnecessary and unprotected personnel from entering. Do not breathe vapor/spray. Avoid contact with skin and eyes. Information regarding personal protective measures: see section 8.
- 6.2. Environmental precautions To avoid possible contamination of the environment, do not discharge into any drains, surface waters or groundwaters.
- 6.3. Methods and materials for containment and cleaning up Cover with an inert, inorganic, non-combustible absorbent material (e.g. dry-lime, sand, soda ash). Place in covered containers using non-sparking tools and transport outdoors. Avoid open flames or sources of ignition (e.g. pilot lights on gas hot water heater). Ventilate area and wash spill site after material pickup is complete.
- 6.4. Reference to other sections Information regarding exposure controls, personal protection and disposal considerations can be found in sections 8 and 13.

7. Handling and storage

- 7.1. Precautions for safe handling Do not store or handle this material near food or drinking water. Do not smoke. Avoid contact with the eyes, skin and clothing. Wear protective clothing and use glasses. Observe the rules of safety and hygiene at work. Keep in the original container or an alternative made from a compatible material.
- 7.2. Conditions for safe storage, including any incompatibilities Store in tightly closed and preferably full containers in a cool, dry and ventilated area, protected from light. Keep away from sources of ignition (e.g. hot surfaces, sparks, flame and static discharges). Keep away from incompatible materials (see section 10).
- 7.3. Specific end use(s) No information available.

8. Exposure controls / personal protection

- 8.1. Control parameters
Components with occupational exposure limits:
No information available
- 8.2. Exposure controls Measures should be taken to prevent materials from being splashed into the body. Provide adequate ventilation, according to the conditions of use. Use a mechanical exhaust if required.
- 8.3. Individual protection measures, such as personal protective equipment
Eye/Face protection: Chemical safety goggles are recommended. Wash contaminated goggles before reuse.
Hand Protection: Chemical-resistant gloves are recommended. Wash contaminated gloves before reuse.
Body protection: Personal protective equipment for the body should be selected based on the task being performed and the risks involved.
Respiratory Protection: In case of insufficient ventilation, use suitable respiratory equipment.
Environmental exposure controls: Emissions from ventilation or process equipment should be checked to ensure they comply with environmental protection legislation. In some cases, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels

9. Physical and chemical properties

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Appearance : Mobile liquid at room temperature
Colour : Yellowish orange to reddish orange
Odour : Fruity
Flash point in °C (closed cup) : +49°
Specific gravity at 20°C : 0.848 to 0.855
Refractive index at 20°C : 1.474 to 1.478
Optical rotation at 20°C : +64° to +75°
Solubility : Soluble in 7 to 10 parts of 90% ethanol (V/V)
Auto-ignition temperature: Not determined
Decomposition temperature: Not determined
Viscosity, dynamic: Not determined
Viscosity, kinematic: Not determined
Explosive properties: Not determined
Oxidising properties: Not determined

10. Stability and reactivity

10.1 Reactivity

The product is stable under storage at normal ambient temperatures. In the presence of light and heat, oxidation can occur.

10.2 Chemical stability

The product is chemically stable under recommended conditions of storage, use and temperature. No significant changes in the composition in time respecting the storage conditions

10.3 Possibility of dangerous reactions

According to our knowledge none in normal use. No hazardous reactions known if stored and handled as recommended.

10.4 Conditions to avoid

Do not heat to high temperature. Do not expose sealed containers in the sun. Keep away from sources of ignition.

10.5 Incompatible materials

Concentrated acids, alkalis and oxidising agents.

10.6 Hazardous decomposition products

This product does not decompose under normal conditions. Under fire conditions the product will produce a mixture of irritating fumes and smoke.

11. Toxicological information

11.1 Information on toxicological effects

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Acute Toxicity

In compliance with generally accepted uses and quantities are no negative impacts to be expected.

LD50 oral: not determined

LD50 dermal: not determined

LC50: not determined

Skin irritation in compliance with generally accepted uses and quantities are no negative impacts to be expected.

Eye damage or irritation in compliance with generally accepted uses and quantities are no negative impacts to be expected.

Respiratory or skin sensitivity in compliance with generally accepted uses and quantities are no negative impacts to be expected.

Germ cell mutagenicity There is not expected negative impact.

Carcinogenicity There is not expected negative impact.

Reproductive toxicity There is not expected negative impact.

STOT – single exposure No information available.

STOT – repeated exposure No information available.

Aspiration hazard No information available

Other information No information available.

12. Ecological information

12.1 Toxicity

Do not allow the product, even if diluted or in small quantities, to penetrate the ground aquifers or drain pipes.

12.2 Persistence and degradability

No data available

12.3 Bioaccumulation potential

No data available

12.4 Ground mobility

No data available

12.5 Results of PBT and vPvB assessment

This product does not meet the PBT/vPvB criteria of REACH, Annex XIII.

12.6 Other adverse effects

No information available. Avoid release to the environment. Do not allow to enter into surface water or drains.

13. Disposal considerations

13.1 Waste treatment methods

Always recover spilled product. Discard waste material with authorized waste management services. Act in accordance with local and national waste regulations.

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14. Transport information

- 14.1. UN number: UN 1169
14.2 UN Proper Shipping Name: LIQUID AROMATIC EXTRACTS
14.3 Transport hazard class(es): 3
14.4. Packing Group: III
14.5 Environmental hazards: This is an environmentally hazardous substance.
14.6 Special precautions for user: None additional
14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code no data available

15. Regulatory information

- 15.1 Regulations and legislation on health, safety and environment specific to the substance or mixture
The regulatory information given above only indicates the principal regulations specifically applicable to the product.
15.2 Chemical safety assessment.
According to our knowledge, no assessment has been conducted on the product.

16. Additional information

16.1 Abbreviations:
ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Test-ing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regula-tion (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergen-cy Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration as-sociated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good La-boratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships car-rying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - Interna-tional Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO – International Maritime Organization; INCI: International Nomenclature of Cosmetic Ingredients; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test popula-tion; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - Interna-tional Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Ef-fect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic sub-stance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quanti-tative) Structure Activity Relationship; PNEC: Predicted No Effect Concentration; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Re-striction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous

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Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of Very High Concern; STE: Short-term exposure; STEL: Short Term Exposure limit; STOT: Specific Target Organ Toxicity; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

16.2 Full H sentences text in section 3 :

H226 – Flammable liquid and vapour.

H227 – Combustible liquid.

H302 – Harmful if swallowed.

H303 – May be harmful if swallowed.

H304 – May be fatal if swallowed and enters airways.

H315 – Causes skin irritation.

H316 – Causes mild skin irritation.

H317 – May cause an allergic skin reaction.

H319 – Causes serious eye irritation.

H331 – Toxic if inhaled. H361 – Suspected of damaging fertility or the unborn child.

H400 – Very toxic to aquatic life.

H401 – Toxic to aquatic life.

H402 – Harmful to aquatic life.

H410 – Very toxic to aquatic life with long lasting effects.

H411 – Toxic to aquatic life with long lasting effects.

H412 – Harmful to aquatic life with long lasting effects.

DECLARATION OF ALLERGENS

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

I.N.C.I.	C.A.S.	Max %
Alpha-Hexyl cinnamic aldehyde (HCA)	101-86-0	-
Amyl cinnamic alcohol	101-85-9	-
Amyl cinnamic aldehyde (ACA)	122-40-7	-
Anisyl alcohol	105-13-5	0.010
Benzyl salicylate	118-58-1	-
Benzyl benzoate	120-51-4	-
Benzyl cinnamate	103-41-3	-
Benzyl alcohol	100-51-6	-
Cinnamic alcohol	104-54-1	-
Cinnamic aldehyde	104-55-2	-

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Citral	5392-40-5	0.1300
Citronellol	106-22-9	-
Coumarin (2p-1-benzopyran-2-one)	91-64-5	-
d-Limonene	5989-27-5	77.0000
Eugenol	97-53-0	-
Farnesol	4602-84-0	-
Geraniol	106-24-1	0.010
Lylal (Hydroxymethylpentyl cyclohexene carbaldoxaldehyde)	31906-04-4	-
Hydroxycitronellal	107-75-5	-
Isoeugenol	97-54-1	-
alpha-Iso-methyl ionone	127-51-5	-
Linalool	78-70-6	0.2000
Methyl heptine carbonate	12/06/11	-
Methyleugenol	93-15-2	-
Oakmoss absolute	9000-50-4	-
p-tert-Butyl-alpha- methylhydrocinnamic aldehyde	80-54-6	-
Tree moss	68648-41-9	-

Disclaimer:

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