



GREEN MANDARIN BRAZIL

1. Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Commercial Product Name	GREEN MANDARIN BRAZIL
Generic name	Essential oil of Mandarin obtained from the peel of Citrus nobilis, Rutaceae by expression and/or distillation, including cold-pressed, distilled, terpenes and essence qualities
Index-No annex VI	—
CAS-No.	8008-31-9
EC-No.	284-521-0
EC CAS-No.	84929-38-4
FEMA-No.	2657
FDA-No.	182.20
CoE-No.	142n
REACH registration No.	01-2120074120-72-0024

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

Raw material for the industry.

1.3. Details of the supplier of the safety data sheet

Name and full details	ASTIER DEMAREST S.A.S 60, route de la Paoute BP 51002 - Le Plan de Grasse 06131 GRASSE CEDEX FRANCE Tel / Ph +33.(0).4.93.40.56.56 contact@astierdemarest.com
E-mail adress of the person in charge of the writing of the material safety data sheets	reglementation@astierdemarest.com

1.4. Emergency telephone number

UNITED KINGDOM

In England and Wales NHS 111 - dial 111

In Scotland NHS 24 - dial 111

IRELAND :

National Poisons Information Centre: 353 (1) 809 2166 (8.00 a.m.to 10.00 p.m. 7 days a week). Healthcare Professionals: +353 (1) 809 2566 (24 hour service)

2. Hazards identification

2.1. Classification of the substance or mixture

	[Flam. Liquid 3] : Flammable liquids - Category 3 [Skin Irrit. 2] : Skin irritation - Category 2 [Skin Sens. 1] : Skin sensitisation - Category 1 [Asp. Tox. 1] : Aspiration hazard - Category 1 [Aquatic Chronic 2] : Chronic aquatic toxicity - Category 2
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2.2. 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. [H411] : Toxic to aquatic life with long lasting effects.



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Precautionary statements	[P210] : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. [P233] : Keep container tightly closed. [P240] : Ground and bond container and receiving equipment. [P241] : Use explosion-proof [electrical/ventilating/lighting/...]equipment. [P242] : Use non-sparking tools. [P243] : Take action to prevent static discharges. [P261] : Avoid breathing dust/fume/ gas/mist/vapours/spray. [P264] : Wash peel 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/hearing protection/... (See MSDS) [P301+P310] : IF SWALLOWED: Immediately call a POISON CENTER/doctor/... [P303+P361+P353] : IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]. [P321] : Specific treatment (see ... on this label). (... Reference to supplemental first aid instruction. See MSDS) [P331] : Do NOT induce vomiting. [P333+P313] : If skin irritation or rash occurs: Get medical advice/attention. [P362+P364] : Take off contaminated clothing and wash it before reuse. [P370+P378] : In case of fire: Use ... for extinction. (See MSDS) [P391] : Collect spillage. [P403+P235] : Store in a well-ventilated place. Keep cool. [P405] : Store locked up. [P501] : Dispose of contents/container to gional/national/international regulation.
Additional Hazard class	—

2.3. Other hazards

Results of PBT and vPvB assessment	Does not meet the criteria to be qualified as persistent, bioaccumulative and toxic, or very persistent and very bioaccumulative according to Annex XIII of Regulation (EU) 1907/2006.
Endocrine disrupting properties	Has not been listed pursuant to Article 59(1) of the REACH Regulation due to its endocrine disrupting properties, and is only known to have endocrine disrupting properties in accordance with the stated criteria in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.
Other informations	Not determined

3. Composition/information on ingredients

3.1. Substances

Main constituent	Mandarin orange, extracts
Other constituents (additives, stabilising additive...)	—

3.2. Mixtures / UVCB

- Hazardous components - Classification according to Regulation (EC) No 1272/2008

Name	EC No	CAS No	CLP - Categories	CLP - Hazard Statement	Mini	Maxi
alpha-Pinene	201-291-9	80-56-8	Flam. Liquid 3 Acute Tox. O 4 Skin Irrit. 2 Skin. Sens. 1B Asp. Tox. 1 Aquatic Acute 1 Aquatic Chronic 1	H226 H302 H315 H317 H304 H400 H410	2 %	3.5 %
alpha-Terpinene	601-095-00-7	99-86-5	Flam. Liquid 3 Acute Tox. O 4 Skin. Sens. 1 Asp. Tox. 1 Aquatic Chronic 2 Oral ETA = 1680 mg/kg pc	H226 H302 H317 H304 H411	0 %	0.6 %
alpha-Terpinolene	209-578-0	586-62-9	Skin. Sens. 1B Asp. Tox. 1 Aquatic Acute 1 Aquatic Chronic 1	H317 H304 H400 H410	0.5 %	1.5 %
alpha-Thujene	220-686-7	2867-05-2	Flam. Liquid 3 Skin. Sens. 1	H226 H317	0 %	1 %
beta-Caryophyllene	201-746-1	87-44-5	Skin. Sens. 1B Asp. Tox. 1	H317 H304	0 %	0.5 %



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beta-Phellandrene	209-081-9	555-10-2	Flam. Liquid 3 Asp. Tox. 1 Skin Sens. 1	H226 H304 H317	0 %	1 %
beta-Pinene	204-872-5	127-91-3	Flam. Liquid 3 Skin Irrit. 2 Skin Sens. 1B Asp. Tox. 1 Aquatic Acute 1 Aquatic Chronic 1	H226 H315 H317 H304 H400 H410	1 %	2 %
Dipentene	601-029-00-7	138-86-3	Flam. Liq. 3 Skin Irrit. 2 Skin Sens. 1B Aquatic Acute 1 Aquatic Chronic 1	H226 H315 H317 H400 H410	65 %	75 %
gamma-Terpinene	202-794-6	99-85-4	Flam. Liq. 3 Repr. 2 Asp. Tox. 1 Aquatic Chronic 2	H226 H361 H304 H411	16 %	22.5 %
Linalool	603-235-00-2	78-70-6	Skin Sens. 1B	H317	0 %	0.2 %
Myrcene	204-622-5	123-35-3	Flam. Liq. 3 Skin Irrit. 2 Eye Irrit. 2 Asp. Tox. 1 Aquatic Acute 1 Aquatic Chronic 2	H226 H315 H319 H304 H400 H411	0 %	5 %
p-Cymene	601-094-00-1	99-87-6	Flam. Liq. 3 Asp. Tox. 1 Acute Tox. I 3 Aquatic Chronic 2 Inhalation ETA = 3 mg/l (vapeurs)	H226 H331 H304 H411	0 %	5 %
Sabinene	222-212-4	3387-41-5	Acute Tox. O 4	H302	0 %	1 %

4. First aid measures

4.1. Description of first aid measures

Skin contact	Remove contaminated clothing. Wash contaminated area with copious amounts of water and soap. Ask for medical advice if irritating.
Eye contact	Rinse immediately with plenty of water holding the eyelids apart. Consult a physician if irritation persists. For contact lens wearers: Rinse immediately with plenty of water. The lenses fall certainly during flushing. If this is not the case, remove if they can be easily removed. Do not give them and do not return the lens after the accident without the advice of your ophthalmologist.
Ingestion	If the person is conscious, rinse mouth with water. DO NOT induce vomiting unless directed by medical personnel. Consult a doctor immediately. NEVER GIVE AN UNCONSCIOUS PATIENT WATER TO DRINK.
Inhalation	Place the patient to fresh air. If symptoms occur, consult a doctor. If unconscious, place in recovery position and get medical attention immediately.

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

For more details on the consequences in terms of health and symptoms, refer to Section 11.

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

In case of doubt or if symptoms persist, consult a doctor. Never give anything by mouth to an unconscious person. It is recommended that those providing first aid have a personal protective equipment. No action shall be taken in the absence of proper training.

5. Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	Carbon dioxide, dry chemical foam
Unsuitable extinguishing media	Direct stream of water.

5.2. Special hazards arising from the substance or mixture

Possible production of toxic fumes in case of fire.

5.3. Advice for firefighters



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Avoid breathing vapors and smoke released. Use a mask if necessary. Do not attack the fire with water: water instead of stifling tends to fuel the fire some aromatic products such as essential oils have the ability to float on water. The fire spread so fast. Cool closed containers exposed to the heat of the fire by spraying water because the pressure can increase at high temperatures. To extinguish an incipient fire based essential oil, use a specific ABC powder fire extinguisher (or equivalent). If the fire is not important, it can be choked by covering with earth, sand or blanket.

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- For non-rescuers:

Wear appropriate personal protective equipment to prevent inhalation and contact with skin, eyes and personal clothing. Refer to section 8. Ensure sufficient ventilation. Remove all sources of ignition. NO SMOKING. Keep unprotected people away.

- For rescuers:

Wear personal protective equipment adapted to the chemical risk. Ensure sufficient ventilation. Remove all sources of ignition. Keep unprotected people away.

6.2. Environmental precautions

Avoid contamination of drains, surface water and groundwater. In case of environmental pollution (soil, drains, sewers, surface water or ground water), inform the competent authorities.

6.3. Methods and material for containment and cleaning up

Large spillages should be contained with absorbent material, sand or inert powder, which will then be scanned and destroyed according to regulations as well as towels, sponges, etc.. used to absorb.

6.4. Reference to other sections

For personal protection, see section 8.

For waste disposal, see section 13.

7. Handling and storage

7.1. Precautions for safe handling

Avoid contact with the product. (See individual protection measures in section 8.) Do not ingest the product. Keep away from food or drink. Do not smoke near. Do not breathe vapors plenty hot. During the incorporation of the product, it must be kept at relatively low temperatures. If necessary temperature rise, it must be provided within short time. Do not heat open flame, fumes or expose to flame or other sources of ignition (eg electrical equipment). An adequate ventilation is desirable. Observe the precautions required by the current hygiene.

7.2. Conditions for safe storage, including any incompatibilities

It is recommended to store in the original sealed packaging, away from heat and avoiding too large temperature differences. An adequate ventilation is desirable. Observe the precautions required by the current hygiene.

7.3. Specific end use(s)

Comply with the regulations, no specific recommendation.

8. Exposure controls/personal protection

8.1. Control parameters

Not determined, refer to the regulations (occupational exposure limit values, Derived No-Effect Level DNEL, Predicted No-Effect Concentration PNEC)

8.2. Exposure controls

- Appropriate engineering controls

Maintain air concentrations below occupational exposure standards. Observe the normal safety precautions for the use of chemicals, ocular fountains and showers should be available nearby workstations.

- Individual protection measures, such as personal protective equipment

Eye / face protection	Safety glasses or goggles (EN 166)
Skin protection	Protective work clothing, gloves resistant to chemicals (EN 374-1) protection. They must be replaced regularly and the first signs of damage. Wash hands before breaks and immediately after handling the product.
Respiratory protection	In well-ventilated areas, respiratory protection is not normally required. If this is not the case, a mask may be required unless otherwise stated in section 2.
Thermal hazards	Always wear appropriate protective equipment and a self-contained breathing apparatus.

- Environmental exposure controls



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Refer to regulations.

9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Liquid
Colour	Dark green to dark brown green
Odour	Fruity, fresh, characteristic of mandarin peel
pH	Not determined
Melting point/freezing point - °C	Not determined
Initial boiling point and boiling range - °C	160
Flash point	51 °C 123 °F
Evaporation rate	Not determined
Flammability (solid, gas)	Flammable liquid and vapour.
Upper/lower flammability or explosive limits	Not determined
Vapour pressure	208.7 Pa at 25°C
Vapour density	Not determined
Relative density	Min 0.853 Max 0.855
Solubility(ies)	Insoluble in water Soluble in ethanol
Partition coefficient: n-octanol/water	Log Kow : 4.38
Auto-ignition temperature - °C	235°C @ 101 325 Pa
Decomposition temperature - °C	Not determined
Viscosity	Not determined
Explosive properties	Product is not explosive. However, formation of explosive air / vapor mixtures are possible.
Oxidising properties	The substance does not contain chemical groups with oxidizing properties.
Particle characteristics	—

9.2. Other information

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10. Stability and reactivity

10.1. Reactivity

Does not present dangerous reactions under normal using conditions.

10.2. Chemical stability

Stable product in proper storage conditions.

10.3. Possibility of hazardous reactions

None according to our knowledge in the normal conditions of use.

10.4. Conditions to avoid

Prolonged or excessive heat and / or exposure to air can cause a non-hazardous decomposition and / or oxidation of the substance.

10.5. Incompatible materials

Avoid strong oxidants and acids.

10.6. Hazardous decomposition products

No dangerous decomposition products known.



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11. Toxicological informations

Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity oral	LD50 (rat) > 5000 mg/kg bw
Acute toxicity dermal	LD50 (rabbit) > 5000 mg/kg bw
Skin corrosion/irritation	Causes skin irritation.
Serious eye damage/irritation	Not irritating
Respiratory or skin sensitisation	May cause an allergic skin reaction.
Germ cell mutagenicity	Not determined
Carcinogenicity	Not determined
Reproductive toxicity	Under the test conditions, the NOAEL for maternal toxicity was considered to be 591 mg/kg bw/day based on the deaths and decreased bodyweight gain. The NOAEL for fetal toxicity was considered to be 591 mg/kg bw/day based on the delayed skeletal formation and decreased bodyweight gain.
STOT - single exposure	Not determined
STOT - repeated exposure	Not determined
Aspiration hazard	May be fatal if swallowed and enters airways.

11.2. Information on other hazards

Endocrine disrupting properties	Not applicable
Other information	Not determined

12. Ecological informations

12.1. Ecological information

Toxic to aquatic life with long lasting effects.

EL50 (fish) > 100 mg / L

LC50 / EC50 (freshwater invertebrates) = 8.9 mg / L

EC50 (seaweed) = 9.7 mg / L

EC10 or NOEC (seaweed) = 7.8 mg / L

12.2. Persistence and degradability

Readily biodegradable

12.3. Bioaccumulative potential

Not determined

12.4. Mobility in soil

Not determined

12.5. Results of PBT and vPvB assessment

Not applicable

12.6. Endocrine disrupting properties

Not applicable

12.7. Other adverse effects

Not determined

13. Disposal considerations

13.1. Waste treatment methods

Prohibit the discharge into the natural environment (air, water, soil). Comply with applicable local regulations for disposal of waste and packaging. Use preferably a collector or an approved company. Keep (the) label (s) of contaminated packaging systematically. Empty packaging reuse

14. Transport informations



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14.1. UN number

UN1197

14.2.A. UN proper shipping name in French

EXTRACTS, LIQUID

14.2.B. UN proper shipping name in English

EXTRACTS, LIQUID

14.3. Class

3

14.4. Packing group

III

14.5. Environmental hazards

The brand "dangerous substance for the environment" should be marked.

14.6. Special precautions for user

Road: refer ADR regulation, including the safety requirements of stakeholders (Section 1.4) and the provisions concerning loading, unloading and handling (Section 7.5).

Shipping: Please refer to the IMDG regulations.

Air transport refer to IATA regulations.

14.7 Maritime transport in bulk according to IMO instruments

Not applicable

14.8. Other transport informations

Tunnel restriction No. ADR	(D/E)
Packing instruction IATA	355
EMS No.	F-E, S-D
Labelling	3 + poisson_arbre



15. Regulatory informations

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

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15.2. Chemical safety assessment

A chemical risk assessment is not required for this substance.

16. Other informations



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Source : IFRA/IOFI Labeling Manual.

<https://chem.echa.europa.eu/>

This manual supplements the product data sheet but does not replace it. This information is correct to the best of our knowledge at the date indicated and are given in good faith. We shall not be held liable for use of the product for purposes other than those for which it is designed. This form does not exempt the user from knowing and applying all the regulations governing his activity. He will be the sole responsibility of the precautions related to his use of the product.

Full text of H-phrases mentioned in Section 3:

H302

Harmful if swallowed.

H319

Causes serious eye irritation.

H331

Toxic if inhaled.

H361

Suspected of damaging fertility or the unborn child.

H400

Very toxic to aquatic life.

H410

Very toxic to aquatic life with long lasting effects.

- Indication of where changes have been made to the previous version