

Petit Grain mandarin essential oil - PGM



**SAFETY DATA SHEET**  
(REACH regulation (EC) n° 1907/2006 - n° 2015/830)

**SECTION 1 : IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**

**1.1. Product identifier**

CSA TSCA: 8014-17-3  
Product name: Petit Grain mandarin essential oil  
Taxonomy: Citrus Reticulata, Rutaceae  
Product code : PGM.

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

Use of the Substance/Mixture: Ingredient used in Flavour and/or Fragrance preparations.

**1.3. Details of the supplier of the safety data sheet**

Registered company name : HERBAL FAMILY Group.  
Address : Industrial zone B & C piece 203 - Obour Cuty, Cairo - Egypt. .18111...  
Telephone : +202 4478 7540/48. Fax : +202 4478 8899.  
Email: hfg@herbalfamilyegypt.com  
Website: www.herbalfamilyegypt.com  
Distributor : HERBAL FAMILY France.  
Address : 400 Avenue Roumanille Quartier Des Templiers  
Zac St. Philippe II -06410 Biot B.P 06906 Sophia Antipolis  
Tél : 003 492 60 7654

**1.4. Emergency telephone number : +2 0128 403 1111**

Association/Organisation : INRS / ORFILA <http://www.centres-antipoison.net>.

**SECTION 2 : HAZARDS IDENTIFICATION**

**2.1. Classification of the substance or mixture**

**In compliance with EC regulation No. 1272/2008 and its amendments.**

Skin irritation, Category 2 (Skin Irrit. 2, H315).  
Skin sensitisation, Category 1 (Skin Sens. 1, H317).  
Reproductive toxicity, Category 2 (Repr. 2, H361).  
Aspiration hazard, Category 1 (Asp. Tox. 1, H304).  
Hazardous to the aquatic environment - Chronic hazard, Category 2 (Aquatic Chronic 2, H411).  
This substance does not present a physical hazard. Refer to the recommendations regarding the other products present on the site.

**2.2. Label elements**

**In compliance with EC regulation No. 1272/2008 and its amendments.**

Hazard pictograms :



GHS07



GHS08



GHS09

Signal Word :

DANGER

Product identifiers (list of classified components) :

EC 202-794-6	P-MENTHA-1,4-DIENE
EC 227-813-5	D-LIMONENE
EC 202-796-7	P-CYMENE
EC 204-872-5	BETA-PINENE
EC 232-087-8	D-.ALPHA.-PINENE
EC 209-578-0	TERPINOLÈNE
EC 201-746-1	BETA-CARYOPHYLLENE
EC 201-134-4	LINALOOL

Hazard statements :

H304 May be fatal if swallowed and enters airways.

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H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H361	Suspected of damaging fertility or the unborn child .
H411	Toxic to aquatic life with long lasting effects.
Precautionary statements - Prevention :	
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
Precautionary statements - Response :	
P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor.
P331	Do NOT induce vomiting.
P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.
Precautionary statements - Disposal :	
P501	Dispose of the contents / container in accordance with the laws in force.

**2.3. Other hazards**

The substance does not fulfil the PBT or vPvP criteria in accordance with annexe XIII of the REACH regulations EC 1907/2006.

**SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS****3.1. Substances****Composition :**

Identification	(EC) 1272/2008	Note	%
CAS: 85-91-6 EC: 201-642-6 METHYL N-METHYLANTHRANILATE	Aquatic Chronic 3, H412		45 - 55
CAS: 99-85-4 EC: 202-794-6 GAMMA TERPINENE	GHS08 Dgr Asp. Tox. 1, H304 Repr. 2, H361	[2]	20 - 30
CAS: 5989-27-5 EC: 227-813-5 D-LIMONENE	GHS08, GHS02, GHS07, GHS09 Dgr Asp. Tox. 1, H304 Flam. Liq. 3, H226 Skin Irrit. 2, H315 Skin Sens. 1B, H317 Aquatic Acute 1, H400 M Acute = 1 Aquatic Chronic 1, H410 M Chronic = 1	[1]	6 - 11
CAS: 99-87-6 EC: 202-796-7 P-CYMENE	GHS09, GHS08 Dgr Asp. Tox. 1, H304 Repr. 2, H361 Aquatic Chronic 2, H411	[2]	3 - 7
CAS: 127-91-3 EC: 204-872-5 BETA-PINENE	GHS07, GHS09, GHS08 Dgr Asp. Tox. 1, H304 Skin Irrit. 2, H315 Skin Sens. 1B, H317 Aquatic Acute 1, H400 M Acute = 1 Aquatic Chronic 1, H410 M Chronic = 1	[1]	1 - 3
CAS: 7785-70-8 EC: 232-087-8 D-.ALPHA.-PINENE	GHS02, GHS07, GHS08, GHS09 Dgr Flam. Liq. 3, H226 Acute Tox. 4, H302 Asp. Tox. 1, H304 Skin Irrit. 2, H315 Skin Sens. 1B, H317 Aquatic Acute 1, H400 M Acute = 1 Aquatic Chronic 1, H410 M Chronic = 1		1 - 3

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CAS: 562-74-3 EC: 209-235-5  4-CARVOMENTHENOL	GHS07 Wng Acute Tox. 4, H302 Skin Irrit. 2, H315 Eye Irrit. 2, H319		0 - 2
CAS: 123-35-3 EC: 204-622-5  MYRCENE	GHS02, GHS07, GHS08, GHS09 Dgr Flam. Liq. 3, H226 Asp. Tox. 1, H304 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Aquatic Chronic 2, H411 Aquatic Acute 1, H400 M Acute = 1		0 - 2
CAS: 586-62-9 EC: 209-578-0  TERPINOLÈNE	GHS09, GHS07, GHS08 Dgr Asp. Tox. 1, H304 Skin Sens. 1, H317 Aquatic Acute 1, H400 M Acute = 1 Aquatic Chronic 1, H410 M Chronic = 1		0 - 1
CAS: 87-44-5 EC: 201-746-1  BETA-CARYOPHYLLENE	GHS07, GHS08 Dgr Asp. Tox. 1, H304 Skin Sens. 1B, H317 Aquatic Chronic 4, H413		0 - 2
CAS: 13877-91-3 EC: 237-641-2  3,7-DIMETHYL-1,3,6-OCTATRIENE	GHS07, GHS09, GHS08 Dgr Asp. Tox. 1, H304 Skin Irrit. 2, H315 Aquatic Chronic 2, H411 Aquatic Acute 1, H400 M Acute = 1		0 - 2
CAS: 78-70-6 EC: 201-134-4  LINALOOL	GHS07 Wng Skin Irrit. 2, H315 Skin Sens. 1B, H317 Eye Irrit. 2, H319		0 - 1

**Information on ingredients :**

- [1] Substance for which maximum workplace exposure limits are available.  
[2] Carcinogenic, mutagenic or reprotoxic (CMR) substance.

**SECTION 4 : FIRST AID MEASURES**

As a general rule, in case of doubt or if symptoms persist, always call a doctor.

NEVER induce swallowing by an unconscious person.

**4.1. Description of first aid measures****In the event of splashes or contact with skin :**

Remove contaminated clothing and wash the skin thoroughly with soap and water or a recognised cleaner.

Watch out for any remaining product between skin and clothing, watches, shoes, etc.

In the event of an allergic reaction, seek medical attention.

If the contaminated area is widespread and/or there is damage to the skin, a doctor must be consulted or the patient transferred to hospital.

**In the event of swallowing :**

Do not give the patient anything orally.

In the event of swallowing, if the quantity is small (no more than one mouthful), rinse the mouth with water and consult a doctor.

Seek medical attention immediately, showing the label.

If swallowed accidentally, do not allow to drink, do not induce vomiting and transfer to hospital immediately by ambulance. Show the label to the doctor.

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

No data available.

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

No data available.

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**SECTION 5 : FIREFIGHTING MEASURES**

Non-flammable.

**5.1. Extinguishing media**

**Suitable methods of extinction**

In the event of a fire, use :

- sprayed water or water mist
- foam
- multipurpose ABC powder
- BC powder
- carbon dioxide (CO<sub>2</sub>)

**Unsuitable methods of extinction**

In the event of a fire, do not use :

- water jet

**5.2. Special hazards arising from the substance or mixture**

A fire will often produce a thick black smoke. Exposure to decomposition products may be hazardous to health.

Do not breathe in smoke.

In the event of a fire, the following may be formed :

- carbon monoxide (CO)
- carbon dioxide (CO<sub>2</sub>)

**5.3. Advice for firefighters**

No data available.

**SECTION 6 : ACCIDENTAL RELEASE MEASURES**

**6.1. Personal precautions, protective equipment and emergency procedures**

Consult the safety measures listed under headings 7 and 8.

**For non first aid worker**

Avoid any contact with the skin and eyes.

**For first aid worker**

First aid workers will be equipped with suitable personal protective equipment (See section 8).

**6.2. Environmental precautions**

Contain and control the leaks or spills with non-combustible absorbent materials such as sand, earth, vermiculite, diatomaceous earth in drums for waste disposal.

Prevent any material from entering drains or waterways.

**6.3. Methods and material for containment and cleaning up**

Clean preferably with a detergent, do not use solvents.

**6.4. Reference to other sections**

No data available.

**SECTION 7 : HANDLING AND STORAGE**

Requirements relating to storage premises apply to all facilities where the substance is handled.

Individuals with a history of skin sensitisation should not, under any circumstance, handle this substance.

Avoid exposure to pregnant women and warn women of child-bearing age of the possible risks

**7.1. Precautions for safe handling**

Always wash hands after handling.

Remove and wash contaminated clothing before re-using.

**Fire prevention :**

Never inhale this substance.

Prevent access by unauthorised personnel.

**Recommended equipment and procedures :**

For personal protection, see section 8.

Observe precautions stated on label and also industrial safety regulations.

Avoid exposure - obtain special instructions before use.

**Prohibited equipment and procedures :**

No smoking, eating or drinking in areas where the substance is used.

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**7.2. Conditions for safe storage, including any incompatibilities**

No data available.

**Storage**

Keep away from food and drink, including those for animals.

**Packaging**

Always keep in packaging made of an identical material to the original.

**7.3. Specific end use(s)**

No data available.

**SECTION 8 : EXPOSURE CONTROLS/PERSONAL PROTECTION****8.1. Control parameters****Occupational exposure limits :**

- Germany - AGW (BAuA - TRGS 900, 08/08/2019) :

CAS	VME :	VME :	Excess	Notes
5989-27-5		5 ppm 28 mg/m <sup>3</sup>		4(II)

- Spain (Instituto Nacional de Seguridad e Higiene en el Trabajo (INSHT), 2017) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
5989-27-5	30 ppm 168 mg/m <sup>3</sup>			Sen. via dermica	
127-91-3	20 ppm 113 mg/m <sup>3</sup>			Sen	

**8.2. Exposure controls****Personal protection measures, such as personal protective equipment**

Pictogram(s) indicating the obligation of wearing personal protective equipment (PPE) :



Use personal protective equipment that is clean and has been properly maintained.

Store personal protective equipment in a clean place, away from the work area.

Never eat, drink or smoke during use. Remove and wash contaminated clothing before re-using. Ensure that there is adequate ventilation, especially in confined areas.

**- Eye / face protection**

Avoid contact with eyes.

Use eye protectors designed to protect against liquid splashes

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

**- Hand protection**

Use suitable protective gloves that are resistant to chemical agents in accordance with standard EN374.

Gloves must be selected according to the application and duration of use at the workstation.

Protective gloves need to be selected according to their suitability for the workstation in question : other chemical products that may be handled, necessary physical protections (cutting, pricking, heat protection), level of dexterity required.

Type of gloves recommended :

- Nitrile rubber (butadiene-acrylonitrile copolymer rubber (NBR))

- PVA (Polyvinyl alcohol)

Recommended properties :

- Impervious gloves in accordance with standard EN374

**- Body protection**

Avoid skin contact.

Wear suitable protective clothing.

Suitable type of protective clothing :

In the event of substantial spatter, wear liquid-tight protective clothing against chemical risks (type 3) in accordance with EN14605 to prevent skin contact.

In the event of a risk of splashing, wear protective clothing against chemical risks (type 6) in accordance with EN13034 to prevent skin contact.

Work clothing worn by personnel shall be laundered regularly.

After contact with the product, all parts of the body that have been soiled must be washed.

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**SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES****9.1. Information on basic physical and chemical properties****General information :**

Physical state : Fluid liquid.

**Important health, safety and environmental information**

pH : Not relevant.  
Boiling point/boiling range : Not specified.  
Flash Point : 61.00 °C.  
Vapour pressure (50°C) : Not relevant.  
Density : CoA  
Water solubility : Insoluble.  
Viscosity:  $v < 7 \text{ mm}^2/\text{s}$  (40°C)  
Melting point/melting range : Not specified.  
Self-ignition temperature : Not specified.  
Decomposition point/decomposition range : Not specified.

**9.2. Other information**

No data available.

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

No data available.

**10.2. Chemical stability**

This substance is stable under the recommended handling and storage conditions in section 7.

**10.3. Possibility of hazardous reactions**

No data available.

**10.4. Conditions to avoid**

No data available.

**10.5. Incompatible materials**

No data available

**10.6. Hazardous decomposition products**

The thermal decomposition may release/form :

- carbon monoxide (CO)
- carbon dioxide (CO<sub>2</sub>)

**SECTION 11 : TOXICOLOGICAL INFORMATION****11.1. Information on toxicological effects**

May cause irreversible damage to the skin; namely inflammation of the skin or the formation of erythema and eschar or oedema following exposure up to four hours.

May cause an allergic reaction by skin contact.

Suspected human reproductive toxicant.

Aspiration toxicity includes severe acute effects such as chemical pneumonia, varying degrees of pulmonary injury or death following aspiration.

May be fatal if swallowed and enters airways.

Aspiration toxicity includes severe acute effects such as chemical pneumonia, varying degrees of pulmonary injury or death following aspiration.

**11.1.2 Complex substance****Aspiration hazard :**

May be fatal if swallowed and enters airways.

Aspiration toxicity includes severe acute effects such as chemical pneumonia, varying degrees of pulmonary injury or death following aspiration.

**Monograph(s) from the IARC (International Agency for Research on Cancer) :**

CAS 123-35-3 : IARC Group 2B : The agent is possibly carcinogenic to humans.

CAS 5989-27-5 : IARC Group 3 : The agent is not classifiable as to its carcinogenicity to humans.

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**SECTION 12 : ECOLOGICAL INFORMATION**

Toxic to aquatic life with long lasting effects.

The product must not be allowed to run into drains or waterways.

**12.1. Toxicity**

**12.1.2 Complex substance**

No aquatic toxicity data available for the substances.

**12.2. Persistence and degradability**

**12.2.1. Substances**

3,7-DIMETHYL-1,3,6-OCTATRIENE (CAS: 13877-91-3)

Biodegradability : no degradability data is available, the substance is considered as not degrading quickly.

4-CARVOMENTHENOL (CAS: 562-74-3)

Biodegradability : no degradability data is available, the substance is considered as not degrading quickly.

P-CYMENE (CAS: 99-87-6)

Biodegradability : no degradability data is available, the substance is considered as not degrading quickly.

P-MENTHA-1,4-DIENE (CAS: 99-85-4)

Biodegradability : no degradability data is available, the substance is considered as not degrading quickly.

METHYL N-METHYLANTHRANILATE (CAS: 85-91-6)

Biodegradability : no degradability data is available, the substance is considered as not degrading quickly.

**12.3. Bioaccumulative potential**

No data available.

**12.4. Mobility in soil**

No data available.

**12.5. Results of PBT and vPvB assessment**

No data available.

**12.6. Other adverse effects**

No data available.

**SECTION 13 : DISPOSAL CONSIDERATIONS**

Proper waste management of the substance and/or its container must be determined in accordance with Directive 2008/98/EC.

**13.1. Waste treatment methods**

Do not pour into drains or waterways.

**Waste :**

Waste management is carried out without endangering human health, without harming the environment and, in particular without risk to water, air, soil, plants or animals.

Recycle or dispose of waste in compliance with current legislation, preferably via a certified collector or company.

Do not contaminate the ground or water with waste, do not dispose of waste into the environment.

**Soiled packaging :**

Empty container completely. Keep label(s) on container.

Give to a certified disposal contractor.

**SECTION 14 : TRANSPORT INFORMATION**

Transport product in compliance with provisions of the ADR for road, RID for rail, IMDG for sea and ICAO/IATA for air transport (ADR 2019 - IMDG 2018 - ICAO/IATA 2020).

**14.1. UN number**

3082

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**14.2. UN proper shipping name**

UN3082=ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.  
(d-limonene)

**14.3. Transport hazard class(es)**

- Classification :



9

**14.4. Packing group**

III

**14.5. Environmental hazards**

- Environmentally hazardous material :

**14.6. Special precautions for user**

ADR/RID	Class	Code	Pack gr.	Label	Ident.	LQ	Provis.	EQ	Cat.	Tunnel
	9	M6	III	9	90	5 L	274 335 375 601	E1	3	-

Not subject to this regulation if Q <= 5 l / 5 kg (ADR 3.3.1 - DS 375)

IMDG	Class	2°Label	Pack gr.	LQ	EMS	Provis.	EQ	Stowage Handling	Segregation
	9	-	III	5 L	F-A, S-F	274 335 969	E1	Category A	-

Not subject to this regulation if Q <= 5 l / 5 kg (IMDG 3.3.1 - 2.10.2.7)

IATA	Class	2°Label	Pack gr.	Passager	Passager	Cargo	Cargo	note	EQ
	9	-	III	964	450 L	964	450 L	A97 A158 A197	E1
	9	-	III	Y964	30 kg G	-	-	A97 A158 A197	E1

Not subject to this regulation if Q <= 5 l / 5 kg (IATA 4.4.4 - DS A197)

For limited quantities, see part 2.7 of the OACI/IATA and chapter 3.4 of the ADR and IMDG.

For excepted quantities, see part 2.6 of the OACI/IATA and chapter 3.5 of the ADR and IMDG.

**14.7. Transport in bulk according to Annex II of Marpol and the IBC Code**

No data available.

**SECTION 15 : REGULATORY INFORMATION****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****- Classification and labelling information included in section 2:**

The following regulations have been used:

- EU Regulation No. 1272/2008 amended by EU Regulation No. 2020/217 (ATP 14)

**- Container information:**

No data available.

**- Particular provisions :**

No data available.

**15.2. Chemical safety assessment**

No data available.



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**SECTION 16 : OTHER INFORMATION**

Since the user's working conditions are not known by us, the information supplied on this safety data sheet is based on our current level of knowledge and on national and community regulations.

It is at all times the responsibility of the user to take all necessary measures to comply with legal requirements and local regulations.

The information in this safety data sheet must be regarded as a description of the safety requirements relating to the substance and not as a guarantee of the properties thereof.

**Wording of the phrases mentioned in section 3 :**

H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
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.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
H413	May cause long lasting harmful effects to aquatic life.

**Abbreviations :**

CMR: Carcinogenic, mutagenic or reprotoxic.

ADR : European agreement concerning the international carriage of dangerous goods by Road.

IMDG : International Maritime Dangerous Goods.

IATA : International Air Transport Association.

ICAO : International Civil Aviation Organisation

RID : Regulations concerning the International carriage of Dangerous goods by rail.

WGK : Wassergefährdungsklasse (Water Hazard Class).

GHS07 : Exclamation mark

GHS08 : Health hazard

GHS09 : Environment

PBT: Persistent, bioaccumulable and toxic.

vPvB : Very persistent, very bioaccumulable.

SVHC : Substances of very high concern.

This MSDS is valid until further notice by the manufacturer.  
The manufacturer should notify its customers or send the updated version if any changes occurred.