

PETITGRAIN BIGARADE

Ref. 21311

Version 5RME12 (Revision Number: 5 - Revision Date: April 2023)

Page 1/6

1. IDENTIFICATION OF THE SUBSTANCE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

product trade name: Petitgrain Bigarade - Ref. 21311
 EC name/registration name: Orange, sour, ext.
 EC number: 277-143-2
 CAS number (EC inventory): 72968-50-4
 REACh Registration Number: exempt - flavours use

1.2 Relevant identified uses of the substance and uses advised against

relevant uses: flavouring agent - ingredient for industrial manufacturing.
 uses advised against: not for personal use in this form or concentration.

1.3 Details of the supplier of the safety data sheet

company: CAPUA 1880 s.r.l. - Zona Industriale, 89052 Campo Calabro (RC) - ITALY • www.webcapua.com
 telephone number: phone: +390965793901 • fax: +390965797111/757792
 responsible person: Dr. Gianfranco Capua (CEO) • phone: +3909657939236 • mail: sales@webcapua.com
 manufacturing plant: Zona Industriale, 89052 Campo Calabro (RC) - ITALY
 competent person SDS: mail: legis@webcapua.com

1.4 Emergency telephone number

supplier: 9:30÷17:03: +390965793901 (languages: IT, EN, FR, DE, ES) • other time: +393483852033 (languages: IT, EN, FR).
 poison control center: Azienda Ospedaliera Niguarda Ca' Granda (MILANO - ITALY) +390266101029 (languages: IT, EN).

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance

Reg. (EC) No 1272/2008:	-	Asp. Tox. 1	Skin Irrit. 2	Skin Sens. 1
hazard categories:	FL4	AH1	SCI2	SS1
hazard statements:	H227	H304	H315	H317
hazard pictograms:	-	GHS08	GHS07	

2.2 Label elements

hazard pictograms:



signal word: danger
 hazard statements: H304, H315, H317
 precautionary statement: P210, P241, P262, P273, P280, P301/310, P303/361/353, P305/351/338, P331, P405, P501

2.3 Other hazards

Ecological information:

according to Annex XIII of REACh Regulation, the substance contains no constituent considered either Persistent, Bioaccumulative and Toxic (PBT), or very Persistent and very Bioaccumulative (vPvB) at a concentration equal to or greater than 0.1%.

The substance contains no constituent identified as having endocrine disrupting properties according to REACh Article 59(1) or in accordance with the criteria set out in Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0.1%.

Toxicological information:

the substance contains no constituent identified as having endocrine disrupting properties according to REACh Article 59(1) or Commission Delegated regulation (EU) 2017/2100 at a concentration equal to or greater than 0.1%.

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substance

botanical origin: *Citrus aurantium*, (L)
 production process: obtained by physical means from the leaves of the bitter orange tree.
 status: 100% Natural Complex Substance
 EU name: Orange, sour, ext.
 EC number: 277-143-2
 CAS number (EC inventory): 72968-50-4
 other CAS number: 8014-17-3

3.1.1 Substance: main constituents & typical values

common name	EINECS	CAS	hazards classification	content (%)
linalyl acetate	115-95-7	204-116-4	Flam. Liq. 4;H227 Skin Irrit. 2;H315 Eye Irrit. 2B;H320 Skin Sens. 1B;H317 Aquatic Acute 3;H402	≤62.00
linalool	201-134-4	78-70-6	Flam. Liq. 4;H227 Acute Tox. 5 (Oral);H303 Skin Irrit. 2;H315 Eye Irrit. 2A;H319 Skin Sens. 1B;H317 Aquatic Acute 3;H402	≤35.00
limonene	227-813-5	5989-27-5	Flam. Liq. 3;H226 Skin Irrit. 2;H315 Skin Sens. 1B;H317 Asp. Tox. 1;H304 Aquatic Acute 1;H400 Aquatic Chronic 3;H412	≤5.00

PETITGRAIN BIGARADE

Version 5RME12 (Revision Number: 5 - Revision Date: April 2023)

Ref. 21311

Page 2/6

4. FIRST AID MEASURES

4.1 Description of first aid measures

inhalation: move to fresh air for at least 15 minutes, in case of complaints seek medical attention.
 contact with the skin: remove contaminated clothing and wash with water and soap the contaminated part, make sure you have eliminated the contamination - in case of complaints seek medical attention.
 contact with the eyes: abundant eye-wash for several minutes with pure water, make sure you have eliminated the contamination, in case of persistent irritation seek medical attention.
 ingestion: ask **immediately** medical assistance - mouth washing with water and **do not provoke vomiting**.

4.2 Most important symptoms and effects, both acute and delayed

symptoms: inhalation: can cause slight headache - contact: can cause eye irritation - can cause slight skin rash.
 acute and delayed effects: no post-disorder effects are reported.

4.3 Indication of any immediate medical attention and special treatment needed

immediate medical assistance: see point 4.1.
 immediate/special treatment: see point 4.1.
 first aid specific means: eye wash fountain / safety shower should be available in the work area.

5. FIREFIGHTING MEASURES

5.1 Extinguishing media

suitable extinguishing media: SMALL FIRE: use CO₂, foam, dry powder - LARGE FIRE: use water spray or fog - cool containing vessels with water jet in order to prevent pressure build-up, autoignition or explosion.
 unsuitable extinguishing media: pressurized water jet.

5.2 Special hazards arising from the substance

vapours may form explosive mixture with air - in case of fire, the following can be released: carbon monoxide (CO), carbon dioxide (CO₂), smoke, soot.

5.3 Advice for firefighters

standard procedure for chemical fires - spray extinguishing media to base of flames - use adequate protections for respiratory apparatus, avoid vapour inhalation.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

for non emergency personnel: in an emergency (i.e. unintentional release of the substance) respiratory protection (Gas filter A, Colour code brown) must be worn. Consider the maximum duration for wear. Use insulating device for respiratory protection with an independent air supply if the concentration is above the usage this for filter devices or in circumstances which are unclear - use adequate protections solvent resistant: security shoes, bodysuit, gloves and protective goggles (see section 8).
 for emergency responders: as per non emergency personnel.
 emergency procedures: remove any ignition source and ensure adequate ventilation in working areas following accidental releases.

6.2 Environmental precautions

keep away from drains - keep away from surface and ground water.

6.3 Methods and material for containment and cleaning up

keep away from heat and use non-combustible absorbing sawdust (sand, specific binder). Refer to section 13 for the appropriate methods of waste treatment.

6.4 Reference to other sections

see section 4, 8 & 13

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

safe handling: during handling keep original container closed - avoid contact with skin and eyes - wear adequate protective gloves and eye/face protection - avoid any sources of ignition - avoid exposing to high temperature during processing - maintain adequate local and general ventilation where product is handled.
 hygiene at work: do not ingest or apply to the skin as such - no smoking - remove contaminated clothing - good personal washing routines should be followed - if at risk of contamination, foods, beverages and other articles of consumption must not be stored or consumed at the work areas.

7.2 Conditions for safe storage, including any incompatibilities

container: to be stored in stainless steel drums, preferably under inert atmosphere (nitrogen) with minimum head space, protected from day-light. • **take note**: the container used during transportation must be considered only as a temporary container and it must not be considered in any case adequate for medium or long term warehousing.
 conditions: stored in a dry, aerated place, away from any heat source and ignition source.
 temperature: from 5 °C to 21 °C.

7.3 Specific end uses

use as flavouring agent - the information of this section is not related to the use of the product in combination with any other material or any other process altering its characteristics.

PETITGRAIN BIGARADE

Ref. 21311

Version 5RME12 (Revision Number: 5 - Revision Date: April 2023)

Page 3/6

8. EXPOSURE CONTROL/PERSONAL PROTECTION

8.1 Control parameters

occupational exposure limit: Component with limit values that require monitoring at the workplace:
CAS 5989-27-5, (R)-p-mentha-1,8-diene
AGW (Germany): 110 mg/m³, 20 ppm, 2(II); DFG, Sh, Y

8.2 Exposure control

a good basic standard of occupational hygiene is to be implemented (see also section 7).

8.2.1 Appropriate engineering controls

where appropriate, use closed system to transfer and process this material - if appropriate, isolate mixing rooms and other areas where this material is used or openly handled - maintain these areas under negative air pressure relative to the rest of the plant.

8.2.2 Individual protection measures, such as personal protective equipment



eye/face protection: protective goggles with built-in-frame tested to EN166 (should be checked regularly).

skin protection - hand: suitable gloves tested to EN374 (should be checked regularly) - always use with clean, dry hands.



skin protection - other: protective work clothing solvent resistant (should be checked regularly).

respiratory protection: not necessary in adequate local with general ventilation - avoid breathing vapors.

thermal hazards: none.

8.2.3 Environmental exposure controls

the usual precautions in handling chemicals have to be observed.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

appearance:	liquid
colour:	amber to very pale yellow
odour:	citrusy
odour threshold:	N/D
pH:	N/A
initial boiling point (& range):	N/D
melting point/freezing point:	N/A
flash point:	68 °C (154.4 °F)
evaporation rate:	N/D
upper/lower explosive limits:	N/D
vapour pressure:	N/D
vapour density:	N/D
relative density d_4^{20} :	0.8790-0.8990
solubility:	in alcohol & other oils / negligible in H ₂ O
partition coefficient n-octanol/H ₂ O:	N/D
auto-ignition temperature:	N/D
decomposition temperature:	N/D
viscosity:	N/D
explosive properties:	none
oxidizing properties:	none

9.2 Other information

9.2.1. Information with regard to physical hazard classes

none

9.2.2. Other safety characteristics

none

10. STABILITY AND REACTIVITY

10.1 Reactivity

substance not reactive with water - substance not reactive if used according to storage & handling conditions & identified uses (see subsection 1.2).

10.2 Chemical stability

substance stable if used according to storage & handling conditions & identified uses (see subsection 1.2). ● **shelf life:** 18 months, as per recommended storage & handling conditions (see section 7).

10.3 Possibility of hazardous reactions

none if used according to storage & handling conditions & identified uses (see subsection 1.2).

10.4 Conditions to avoid

avoid exposure to heat.

10.5 Incompatible materials

highly oxidizing agents.

PETITGRAIN BIGARADE

Ref. 21311

Version 5RME12 (Revision Number: 5 - Revision Date: April 2023)

Page 4/6

10.6 Hazardous decomposition products

no known hazardous decomposition products under recommended storage & handling conditions - in case of combustion: carbon monoxide (CO), carbon dioxide (CO₂).

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

acute toxicity:	no data available.
skin corrosion/irritation:	no data available.
serious eye damage/irritation:	no data available.
respiratory sensitisation:	no data available.
skin sensitisation:	no data available.
germ cell mutagenicity:	no data available.
carcinogenicity:	no data available.
reproductive toxicity:	no data available.
aspiration hazard:	no data available.

11.2 Information on other hazards

11.2.1 Endocrine disrupting properties

the substance contains no constituent identified as having endocrine disrupting properties according to REACH Article 59(1) or Commission Delegated regulation (EU) 2017/2100 at a concentration equal to or greater than 0.1%.

11.2.2 Other information

no data available

12. ECOLOGICAL INFORMATION

12.1 Toxicity

aquatic life:	no data available.
fish/aquatic invertebrates:	no data available.

12.2 Persistence and degradability

this substance to be considered as a readily biodegradable substance. Based on its ready biodegradability, oil does not fulfill the criteria for persistent.

12.3 Bioaccumulative potential

as the constituents are readily biodegradable, it is likely that they will also be biotransformed in higher organisms so bioaccumulation is actually not expected.

12.4 Mobility in soil

this substance is considered as a readily biodegradable NCS. Based on the ready biodegradability of the NCS, simulation tests in surface water, sediment and soil are not required.

12.5 Results of PBT and vPvB assessment

according to Annex XIII of REACH Regulation, the substance contains no constituent considered either Persistent, Bioaccumulative and Toxic (PBT), or very Persistent and very Bioaccumulative (vPvB) at a concentration equal to or greater than 0.1%.

12.6 Endocrine disrupting properties

the substance contains no constituent considered to have endocrine disrupting properties according to REACH Article 59(1) or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0.1%.

12.7 Other adverse effects

no data available

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

the containers used for this product must completely empty before disposal. Dispose product and/or contaminated packaging in accordance with federal, state and local environmental control regulations - disposal through the waste water is illegal.

14. TRANSPORT INFORMATION

14.1 UN Number

not classified

14.2 UN proper shipping name

not applicable

14.3 Transport hazard class

not applicable

14.3.1 Transport hazard symbols

not applicable

PETITGRAIN BIGARADE

Ref. 21311

Version 5RME12 (Revision Number: 5 - Revision Date: April 2023)

Page 5/6

14.4 Packing group
not applicable

14.5 Environmental hazards
none

14.6 Special precautions for user
in case of pouring out, make sure to label new package accordingly, reproducing original label with relevant symbols

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code
not applicable

15. REGULATORY INFORMATION

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

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Commission Regulation (EU) 2020/878 of 18 June 2020 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH).

15.2 Chemical Safety Assessment
N/D

16. OTHER INFORMATION

a Revision

Version 2RME05

Revision Number: 2 - Revision Date: February 13, 2020

- SECTION 3.1.1 SUBSTANCE: MAIN CONSTITUENTS - hazard classification revised for listed Main Constituents

Version 3RME05

Revision Number: 3 - Revision Date: July 05, 2021

- SECTION 7.2 Conditions for safe storage, including any incompatibilities – storage temperature update
3°C to 7°C → 5°C to 21°C

Version 4RME05

Revision Number: 4 - Revision Date: April 11, 2022

- SECTION 10.2 Chemical stability – shelf life update:
365 days → 547 days

Version 5RME05

Revision Number: 5 - Revision Date: April 2023

Updates to Sections: 2, 11, 12 according to Reg. (EC) No 2020/878

b Legend

CLP: Regulation (EC) No 1272/2008

Asp. Tox.: aspiration hazard

Aquatic Chronic: aquatic hazard

Skin Irrit.: skin irritation hazard

Skin Sens.: skin sensitization hazard

Eye Irrit.: eye irritation hazard

Flam. Liq.: flammable liquid hazard

c Literature references and source of data

RIFM - FEMA database

d List of relevant hazard and precautionary statements

H227 combustible liquid

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

P210 keep away from heat/sparks/open flames/hot surfaces – no smoking

P241 use explosion-proof electrical/ventilating/lighting/equipment

P262 do not get in eyes, on skin or on clothing

P273 avoid release to the environment

P280 wear protective gloves/eye protection/face protection

P301/310 if swallowed: immediately call a poison center or doctor/physician

P303/361/353 if on skin (or hair): remove/take off immediately all contaminated clothing. rinse skin with water/shower

P305/351/338 if in eyes: rinse cautiously with water for several minutes. remove contact lenses if present and easy to do. continue rinsing

P331 do not induce vomiting

P405 store locked up

P501 dispose product/container in accordance with applicable regulations

e Inventories & other

	CAS	ID	NOTE
EINECS	72968-50-4	277-143-2	
TSCA	8014-17-3	-	
IECSC	8014-17-3	-	
KECI	8014-17-3	KE-26791	
DSL	8014-17-3	-	
AICS	8014-17-3	-	
ENCS - ISHL	8014-17-3	11-(1)-846	
NZIOC	8014-17-3	-	
PICCS	8014-17-3	-	
FEMA	8014-17-3	2855	
RIFM	8014-17-3	233-E2.12	
HS Code	-	3301121000	EU TARIC

f Further information

the information on this SDS is correct to the best of our knowledge, covering the involved product at the date of its publication. They apply to the product as such as per the described specifications. The information is not related to the use of the product in combination with any other material or any other process altering its characteristics. The end user should apply to the existing normative and laws covering the use of the product, the hygiene and security at work. The container used during transportation must be considered only as a temporary container and it must not be considered in any case adequate for medium or long term warehousing. Upon receipt, our product must be stored as soon as possible in compliance with section 7.2 of this SDS. The information given in this SDS is in accordance with the Reg. (EC) No 2020/878.