



Safety Data Sheet dated 26/11/2018, version 1

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Identification of the substance:

Trade name: BOURBON GERANIUM OIL

Trade code: OL.ES.59

CAS number: 90082-51-2

EC number: 290-140-0

REACH number: 01-2120769423-50

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

Recommended use:

Raw material for fragrances, cosmetics, food

1.3. Details of the supplier of the safety data sheet

Company:

ESPERIS SPA

St. Ambrogio Binda 29

20143 MILANO (ITALY)

Tel. +39 02 89122219

Competent person responsible for the safety data sheet:

info@esperis.it

1.4. Emergency telephone number

Antipoison Center - Hospital Name 1 - City - Telephone nbr. (availability information)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

EC regulation criteria 1272/2008 (CLP)

 Warning, Skin Irrit. 2, Causes skin irritation.

 Danger, Eye Dam. 1, Causes serious eye damage.

 Warning, Skin Sens. 1B, May cause an allergic skin reaction.

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

Hazard pictograms:



Danger

Hazard statements:

H315 Causes skin irritation.

H318 Causes serious eye damage.

H317 May cause an allergic skin reaction.

Precautionary statements:

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P264 Wash ... Thoroughly after handling.

P280 Wear protective gloves/protective clothing/eye protection/face protection.
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P310 Immediately call a POISON CENTER/doctor/...
 P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
 P362+P364 Take off contaminated clothing and wash it before reuse.

Special Provisions:

None

Contains

GERANIOLO

CITRONELLOLO: May produce an allergic reaction.

LINALOLO: May produce an allergic reaction.

CITRAL: May produce an allergic reaction.

Special provisions according to Annex XVII of REACH and subsequent amendments:

None

2.3. Other hazards

vPvB Substances: None - PBT Substances: None

Other Hazards:

No other hazards

SECTION 3: Composition/information on ingredients

3.1. Substances

N.A.

3.2. Mixtures

Hazardous components within the meaning of the CLP regulation and related classification:

Qty	Name	Ident. Number	Classification
>= 30% - < 40%	CITRONELLOLO	CAS: 106-22-9 EC: 203-375-0 REACH No.: 01-21194539 95-23-XXXX	 3.2/2 Skin Irrit. 2 H315  3.3/2 Eye Irrit. 2 H319  3.4.2/1 Skin Sens. 1 H317
>= 15% - < 17.5%	GERANIOLO	CAS: 106-24-1 EC: 203-377-1 REACH No.: 01-21195524 30-49-XXXX	 3.2/2 Skin Irrit. 2 H315  3.3/1 Eye Dam. 1 H318  3.4.2/1B Skin Sens. 1B H317
>= 5% - < 7.5%	LINALOLO	CAS: 78-70-6 EC: 201-134-4 REACH No.: 01-21194740 16-42-XXXX	 3.2/2 Skin Irrit. 2 H315  3.4.2/1B Skin Sens. 1B H317  3.3/2 Eye Irrit. 2 H319
>= 0.1% - < 0.5%	CITRAL	Index number: 605-019-00-3 CAS: 5392-40-5 EC: 226-394-6 REACH No.: 01-21194628 29-23-XXXX	 3.2/2 Skin Irrit. 2 H315  3.4.2/1-1A-1B Skin Sens. 1,1A,1B H317

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Immediately take off all contaminated clothing.

Areas of the body that have - or are only even suspected of having - come into contact with the product must be rinsed immediately with plenty of running water and possibly with soap. OBTAIN IMMEDIATE MEDICAL ATTENTION.

Wash thoroughly the body (shower or bath).

Remove contaminated clothing immediately and dispose off safely.

After contact with skin, wash immediately with soap and plenty of water.

In case of eyes contact:

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

Protect uninjured eye.

In case of Ingestion:

Do not under any circumstances induce vomiting. OBTAIN A MEDICAL EXAMINATION IMMEDIATELY.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

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

None

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

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

Treatment:

None

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Water.

Carbon dioxide (CO₂).

Extinguishing media which must not be used for safety reasons:

None in particular.

5.2. Special hazards arising from the substance or mixture

Do not inhale explosion and combustion gases.

Burning produces heavy smoke.

5.3. Advice for firefighters

Use suitable breathing apparatus .

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

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

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment.

Remove persons to safety.

See protective measures under point 7 and 8.

6.2. Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

Retain contaminated washing water and dispose it.

In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

Suitable material for taking up: absorbing material, organic, sand

6.3. Methods and material for containment and cleaning up

Wash with plenty of water.

6.4. Reference to other sections

See also section 8 and 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.

Don't use empty container before they have been cleaned.

Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.

Contaminated clothing should be changed before entering eating areas.

Do not eat or drink while working.

See also section 8 for recommended protective equipment.

7.2. Conditions for safe storage, including any incompatibilities

Keep away from food, drink and feed.

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Adequately ventilated premises.

7.3. Specific end use(s)

None in particular

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

CITRAL - CAS: 5392-40-5

ACGIH - TWA(8h): 5 ppm - Notes: (IFV), Skin, DSEN, A4 - Body weight eff, URT irr, eye dam

DNEL Exposure Limit Values

CITRONELLOLO - CAS: 106-22-9

Worker Industry: 161.6 03 - Exposure: Human Inhalation - Frequency: Long Term, local effects

Worker Industry: 45.8 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects

Consumer: 13.8 mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic effects

Consumer: 27.5 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects

Consumer: 47.8 03 - Exposure: Human Inhalation - Frequency: Long Term, systemic effects

PNEC Exposure Limit Values

CITRONELLOLO - CAS: 106-22-9

Target: Soil (agricultural) - Value: 0.00371 mg/kg

Target: Fresh Water - Value: 0.0024 mg/l

Target: Marine water - Value: 0.00024 mg/l

Target: Marine water sediments - Value: 0.00256 mg/kg

Target: Freshwater sediments - Value: 0.0256 mg/kg

8.2. Exposure controls

Eye protection:

Use close fitting safety goggles, don't use eye lens.

Protection for skin:

Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton.

Protection for hands:

Use protective gloves that provides comprehensive protection, e.g. P.V.C., neoprene or rubber.

Respiratory protection:

Not needed for normal use.

Thermal Hazards:

None

Environmental exposure controls:

None

Appropriate engineering controls:

None

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Properties	Value	Method:	Notes:
Appearance and colour:	liquid clear	--	--
Odour:	characteristic	--	--
Odour threshold:	N.A.	--	--
pH:	N.A.	--	--
Melting point / freezing point:	N.A.	--	--
Initial boiling point and boiling range:	N.A.	--	--
Flash point:	91 ° C	--	--
Evaporation rate:	N.A.	--	--
Solid/gas flammability:	N.A.	--	--
Upper/lower flammability or explosive limits:	N.A.	--	--
Vapour pressure:	N.A.	--	--
Vapour density:	N.A.	--	--
Relative density:	0.875 - 0.895	--	--
Solubility in water:	insoluble	--	--
Solubility in oil:	soluble in ethanol	--	--
Partition coefficient (n-octanol/water):	N.A.	--	--
Auto-ignition temperature:	N.A.	--	--
Decomposition temperature:	N.A.	--	--
Viscosity:	N.A.	--	--
Explosive properties:	N.A.	--	--
Oxidizing properties:	N.A.	--	--

9.2. Other information

Properties	Value	Method:	Notes:
Miscibility:	N.A.	--	--
Fat Solubility:	N.A.	--	--
Conductivity:	N.A.	--	--
Substance Groups relevant properties	N.A.	--	--

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions

10.2. Chemical stability

- Stable under normal conditions
- 10.3. Possibility of hazardous reactions
None
- 10.4. Conditions to avoid
Stable under normal conditions.
- 10.5. Incompatible materials
None in particular.
- 10.6. Hazardous decomposition products
None.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological information of the product:

PELARGONIUM GRAVEOLENS OIL - CAS: 90082-51-2

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat = 5000 mg/kg

Test: LD50 - Route: Skin - Species: Rabbit = 5000 mg/kg

Toxicological information of the main substances found in the product:

CITRONELLOLO - CAS: 106-22-9

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat = 3450 mg/kg

Test: LD50 - Route: Skin - Species: Rabbit = 2650 mg/kg

GERANILOLO - CAS: 106-24-1

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat = 4800 mg/kg

Test: LD50 - Route: Skin - Species: Rabbit > 5000 mg/kg

LINALOLOLO - CAS: 78-70-6

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat = 2790 mg/kg

Test: LD50 - Route: Skin - Species: Rabbit = 5610 mg/kg

CITRAL - CAS: 5392-40-5

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat > 5000 mg/kg

If not differently specified, the information required in Regulation (EU)2015/830 listed below must be considered as N.A.:

- a) acute toxicity;
- b) skin corrosion/irritation;
- c) serious eye damage/irritation;
- d) respiratory or skin sensitisation;
- e) germ cell mutagenicity;
- f) carcinogenicity;
- g) reproductive toxicity;
- h) STOT-single exposure;
- i) STOT-repeated exposure;
- j) aspiration hazard.

SECTION 12: Ecological information

12.1. Toxicity

Adopt good working practices, so that the product is not released into the environment.

CITRONELLOLO - CAS: 106-22-9

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: fish = 14.66 mg/l - Duration h: 96

GERANILOLO - CAS: 106-24-1

- b) Aquatic chronic toxicity:
 - Endpoint: LC50 - Species: FISH = 3.7 mg/l - Duration h: 96 - Notes: trota iridea
 - LINALOLO - CAS: 78-70-6
- a) Aquatic acute toxicity:
 - Endpoint: EC50 - Species: DAPHNIA = 59000 mg/l - Duration h: 48
 - Endpoint: LC50 - Species: FISH = 27800 mg/l - Duration h: 96
 - Endpoint: EC50 - Species: ALGAE = 88300 mg/l - Duration h: 96
 - CITRAL - CAS: 5392-40-5
- a) Aquatic acute toxicity:
 - Endpoint: LC50 - Species: DAPHNIA = 7 mg/l - Duration h: 48
- 12.2. Persistence and degradability
N.A.
- 12.3. Bioaccumulative potential
N.A.
- 12.4. Mobility in soil
N.A.
- 12.5. Results of PBT and vPvB assessment
vPvB Substances: None - PBT Substances: None
- 12.6. Other adverse effects
None

SECTION 13: Disposal considerations

- 13.1. Waste treatment methods
Recover, if possible. Send to authorised disposal plants or for incineration under controlled conditions. In so doing, comply with the local and national regulations currently in force.

SECTION 14: Transport information

- 14.1. UN number
Not classified as dangerous in the meaning of transport regulations.
- 14.2. UN proper shipping name
N.A.
- 14.3. Transport hazard class(es)
N.A.
- 14.4. Packing group
N.A.
- 14.5. Environmental hazards
N.A.
- 14.6. Special precautions for user
N.A.
- 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code
N.A.

SECTION 15: Regulatory information

- 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture
 - Dir. 98/24/EC (Risks related to chemical agents at work)
 - Dir. 2000/39/EC (Occupational exposure limit values)
 - Regulation (EC) n. 1907/2006 (REACH)
 - Regulation (EC) n. 1272/2008 (CLP)
 - Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013
 - Regulation (EU) 2015/830
 - Regulation (EU) n. 286/2011 (ATP 2 CLP)
 - Regulation (EU) n. 618/2012 (ATP 3 CLP)
 - Regulation (EU) n. 487/2013 (ATP 4 CLP)
 - Regulation (EU) n. 944/2013 (ATP 5 CLP)

Regulation (EU) n. 605/2014 (ATP 6 CLP)
Regulation (EU) n. 2015/1221 (ATP 7 CLP)
Regulation (EU) n. 2016/918 (ATP 8 CLP)
Regulation (EU) n. 2016/1179 (ATP 9 CLP)
Regulation (EU) n. 2017/776 (ATP 10 CLP)

Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:

None

Where applicable, refer to the following regulatory provisions :

Directive 2012/18/EU (Seveso III)
Regulation (EC) nr 648/2004 (detergents).
Dir. 2004/42/EC (VOC directive)

Provisions related to directive EU 2012/18 (Seveso III):

Seveso III category according to Annex 1, part 1
None

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for the mixture.

SECTION 16: Other information

Full text of phrases referred to in Section 3:

H315 Causes skin irritation.
H319 Causes serious eye irritation.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.

Hazard class and hazard category	Code	Description
Skin Irrit. 2	3.2/2	Skin irritation, Category 2
Eye Dam. 1	3.3/1	Serious eye damage, Category 1
Eye Irrit. 2	3.3/2	Eye irritation, Category 2
Skin Sens. 1	3.4.2/1	Skin Sensitisation, Category 1
Skin Sens. 1,1A,1B	3.4.2/1-1A-1B	Skin Sensitisation, Category 1,1A,1B
Skin Sens. 1B	3.4.2/1B	Skin Sensitisation, Category 1B

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Classification according to Regulation (EC) Nr. 1272/2008	Classification procedure
Skin Irrit. 2, H315	Calculation method
Eye Dam. 1, H318	Calculation method
Skin Sens. 1B, H317	Calculation method

This document was prepared by a competent person who has received appropriate training.

Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre,
Commission of the European Communities
SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van
Nostrand Reinold

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This MSDS cancels and replaces any preceding release.

ADR:	European Agreement concerning the International Carriage of Dangerous Goods by Road.
ATE:	Acute Toxicity Estimate
ATEmix:	Acute toxicity Estimate (Mixtures)
CAS:	Chemical Abstracts Service (division of the American Chemical Society).
CLP:	Classification, Labeling, Packaging.
DNEL:	Derived No Effect Level.
EINECS:	European Inventory of Existing Commercial Chemical Substances.
GefStoffVO:	Ordinance on Hazardous Substances, Germany.
GHS:	Globally Harmonized System of Classification and Labeling of Chemicals.
IATA:	International Air Transport Association.
IATA-DGR:	Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
ICAO:	International Civil Aviation Organization.
ICAO-TI:	Technical Instructions by the "International Civil Aviation Organization" (ICAO).
IMDG:	International Maritime Code for Dangerous Goods.
INCI:	International Nomenclature of Cosmetic Ingredients.
KSt:	Explosion coefficient.
LC50:	Lethal concentration, for 50 percent of test population.
LD50:	Lethal dose, for 50 percent of test population.
PNEC:	Predicted No Effect Concentration.
RID:	Regulation Concerning the International Transport of Dangerous Goods by Rail.
STEL:	Short Term Exposure limit.
STOT:	Specific Target Organ Toxicity.
TLV:	Threshold Limiting Value.
TWA:	Time-weighted average
WGK:	German Water Hazard Class.