SAFETY DATA SHEET

(REACH regulation (EC) n° 1907/2006 - n° 453/2010)

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

1.1. Product identifier

Product name : PURESSENTIEL ASSAINISSANT SPRAY AERIEN

Product code : CTG140774/1/01_LAB.

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

BIOCIDE

1.3. Details of the supplier of the safety data sheet

Registered company name : Laboratoire PURESSENTIEL®.

Address : Avenue Louise 149/24. 1050. Bruxelles. BELGIQUE

Telephone : +32 (0)2 535 75 76 Mail : reglementaire@puressentiel.com

1.4. Emergency telephone number : +33 (0)1 45 42 59 59 .

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.

Flammable liquid, Category 2 (Flam. Liq. 2, H225).

Eye irritation, Category 2 (Eye Irrit. 2, H319).

Skin sensitisation, Category 1B (Skin Sens. 1B, H317).

2.2. Label elements

Biocidal mixture (see section 15).

Mixture for spray application.

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

Hazard pictograms :



GHS07



GHS02

Signal Word :

DANGER

Product identifiers :

EC 227-813-5	D-LIMONENE
	PINENES (ALPHA OR BETA)
EC 202-759-5	CARVONE
EC 236-719-3	DELTA-3-CARENE
EC 201-941-1	MENTHONE
EC 224-052-0	TRANS-ANETHOLE [(E)-ANETHOLE]
EC 202-589-1	EUGENOL
EC 203-213-9	CINNAMIC ALDEHYDE

Hazard statements : does not include exemptions < 125ml

H225	Highly flammable liquid and vapour.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.

Precautionary statements - General :

P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.
P 103	Read label before use.

Precautionary statements - Prevention :

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P270	Do no eat, drink or smoke when using this product.

Precautionary statements - Response :

P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P337 + P313	If eye irritation persists: Get medical advice/attention.
P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
P305 + P351	IF IN EYES: Rinse cautiously with water for several minutes.

Precautionary statements - Disposal :

P501	Dispose of contents/container to ...

2.3. Other hazards

The mixture does not contain any substances classified as 'Substances of Very High Concern' (SVHC) by the European CHemical s Agency (ECHA) under article 57 of REACH: http://echa.europa.eu/fr/candidate-list-table

The mixture satisfies neither the PBT nor the vPvB criteria for mixtures in accordance with annexe XIII of the REACH regulations EC 1907/2006.

SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

Composition :

Identification	(EC) 1272/2008	Note	%
INDEX: 603_002_005A CAS: 64-17-5 EC: 200-578-6 REACH: 01-2119457610-43 ETHANOL	GHS07, GHS02 Dgr Flam. Liq. 2, H225 Eye Irrit. 2, H319	[1]	50 <= x % < 100
INDEX: I601029007A 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		2.5 <= x % < 10
INDEX: I_HYDROC HYDROCARBONS	GHS08 Dgr Asp. Tox. 1, H304		2.5 <= x % < 10
INDEX: I78_70_6 CAS: 78-70-6 EC: 201-134-4 REACH: 01-2119474016-42 LINALOOL	GHS07 Wng Eye Irrit. 2, H319 Skin Irrit. 2, H315		2.5 <= x % < 10

INDEX: I115_95_7 CAS: 115-95-7 EC: 204-116-4 REACH: 01-2119454789-19 LINALYL ACETATE	GHS07 Wng Eye Irrit. 2, H319 Skin Irrit. 2, H315		1 <= x % < 2.5
INDEX: I0_0_3 CAS: 80-56-8 EC: 201-291-9 CAS: 127-91-3 EC: 204-872-5 PINENES (ALPHA OR BETA)	GHS09, GHS07, GHS08, GHS02 Dgr Flam. Liq. 3, H226 Asp. Tox. 1, H304 Skin Sens. 1, H317 Aquatic Acute 1, H400 M Acute = 1 Aquatic Chronic 1, H410 M Chronic = 1		1 <= x % < 2.5
INDEX: I99_49_0 CAS: 99-49-0 EC: 202-759-5 CARVONE	GHS07 Wng Skin Sens. 1B, H317		0 <= x % < 1
INDEX: I13466_78_9 CAS: 13466-78-9 EC: 236-719-3 REACH: 01-2119520252-55 DELTA-3-CARENE	GHS08, GHS02, GHS07 Dgr Asp. Tox. 1, H304 Flam. Liq. 3, H226 Skin Irrit. 2, H315 Skin Sens. 1B, H317		0 <= x % < 1
INDEX: I89_80_5 CAS: 89-80-5 EC: 201-941-1 MENTHONE	GHS07 Wng Skin Irrit. 2, H315 Skin Sens. 1B, H317		0 <= x % < 1
INDEX: I4180_23_8 CAS: 4180-23-8 EC: 224-052-0 TRANS-ANETHOLE [(E)-ANETHOLE]	GHS07 Wng Skin Sens. 1B, H317		0 <= x % < 1
INDEX: I97_53_0 CAS: 97-53-0 EC: 202-589-1 EUGENOL	GHS07 Wng Eye Irrit. 2, H319 Skin Sens. 1B, H317		0 <= x % < 1
INDEX: I79_92_5 CAS: 79-92-5 EC: 201-234-8 CAMPHENE	GHS02, GHS07, GHS09 Wng Eye Irrit. 2, H319 Flam. Sol. 2, H228 Aquatic Acute 1, H400 M Acute = 1 Aquatic Chronic 1, H410 M Chronic = 1		0 <= x % < 1
INDEX: I475_20_7 CAS: 475-20-7 EC: 207-491-2 LONGIFOLENE	GHS08, GHS07, GHS09 Dgr Asp. Tox. 1, H304 Skin Sens. 1B, H317 Aquatic Acute 1, H400 M Acute = 10 Aquatic Chronic 1, H410 M Chronic = 10		0 <= x % < 1

INDEX: I104_55_2 CAS: 104-55-2 EC: 203-213-9 REACH: 01-2119935242-45 CINNAMIC ALDEHYDE *	GHS07 Wng Acute Tox. 4, H312 Eye Irrit. 2, H319 Skin Irrit. 2, H315 Skin Sens. 1A, H317		0 <= x % < 1

Information on ingredients :

[1] Substance for which maximum workplace exposure limits are available.

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 exposure by inhalation :

If inhaled, move the patient to fresh air and keep warm and at rest

In the event of splashes or contact with eyes :

Wash thoroughly with soft, clean water for 15 minutes holding the eyelids open.

If there is any redness, pain or visual impairment, consult an ophthalmologist.

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 transferre d 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.

Keep the person exposed at rest. Do not force vomiting.

Seek medical attention immediately, showing the label.

If swallowed accidentally, call a doctor to ascertain whether observation and hospital care will be necessary. Show the label.

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.

SECTION 5 : FIREFIGHTING MEASURES

Flammable.

Chemical powders, carbon dioxide and other extinguishing gas are suitable for small fires.

5.1. Extinguishing media

Keep packages near the fire cool, to prevent pressurised containers from bursting.

Suitable methods of extinction

In the event of a fire, use :

- sprayed water or water mist
- water with AFFF (Aqueous Film Forming Foam) additive
- halon
- foam
- multipurpose ABC powder
- BC powder
- carbon dioxide (CO2)

Prevent the effluent of fire-fighting measures from entering drains or waterways.

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 (CO2)

5.3. Advice for firefighters

Fire-fighting personnel are to be equipped with autonomous insulating breathing apparatus.

SECTION 6 : ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Consult the safety measures listed under headings 7 and 8.

Prevent every risk of ignition of the steams.

Prevent the risks caused by the inhalation of steams.

The pouring can bring the surfaces slippery.

For non first aid worker

Because of the organic solvents contained in the mixture, eliminate sources of ignition and ventilate the area.

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 m aterials such as sand, earth, vermiculite, diatomaceous earth in drums for waste disposal.

Prevent any material from entering drains or waterways.

Use drums to dispose of collected waste in compliance with current regulations (see section 13).

6.3. Methods and material for containment and cleaning up

Clean preferably with a detergent, do not use solvents.

Use some absorbent.

The elimination must be carried out by a registrated salvage professionnal.

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 mixture is handled.

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

7.1. Precautions for safe handling

Always wash hands after handling.

Remove and wash contaminated clothing before re-using.

Ensure that there is adequate ventilation, especially in confined areas.

Remove contaminated clothing and protective equipment before entering eating areas.

Prevent every contact with the skin and the eyes.

Use away of every flame or incandescent point.

Do not eat or drink during the use.

Follow hygiene and security rules because flamable capacity.

Do not inhale steams.

Follow hygiene and security biocidal rules.

Fire prevention :

Handle in well-ventilated areas.

Vapours are heavier than air. They can spread along the ground and form mixtures that are explosive with air.

Prevent the formation of flammable or explosive concentrations in air and avoid vapor concentrations higher than the occupational exposure limits.

Prevent the accumulation of electrostatic charges with connections to earth.

The mixture can become electrostatically charged : always earth during decanting operations . Wear antistatic shoes and clothing and floors should be electrically conductive.

Use the mixture in premises free of naked flames or other sources of ignition and ensure that electrical equipment is suitably protected.

Keep packages tightly closed and away from sources of heat, sparks and naked flames.

Do not use tools which may produce sparks. Do not smoke.

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.

Where the personnel must carry out work in a booth, whether for spraying or otherwise, the ventilation may be inadequate to control particles and solvent vapors in every case.

It is therefore recommended that personnel wear masks with a compressed air supply during spraying operations until the concentration of particles and solvent vapors has fallen below the exposure limits.

Avoid skin and eye contact with this mixture.

Packages which have been opened must be reclosed carefully and stored in an upright position.

Use only in well-ventilated premises.

Keep in original packaging

Prohibited equipment and procedures :

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

Never open the packages under pressure.

7.2. Conditions for safe storage, including any incompatibilities

No data available.

Storage

Keep out of reach of children.

Keep the container tightly closed in a dry, well-ventilated place.

Keep away from all sources of ignition - do not smoke.

Keep well away from all sources of ignition, heat and direct sunlight.

Avoid accumulation of electrostatic charges.

The floor must be impermeable and form a collecting basin so that, in the event of an accidental spillage, the liquid cannot spread beyond this area.

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 :

- France (INRS - ED984 :2008) :

CAS	VME-ppm :	VME-mg/m3 :	VLE-ppm :	VLE-mg/m3 :	Notes :	TMP No :
64-17-5	1000	1900	5000	9500	-	84

- UK / WEL (Workplace exposure limits, EH40/2005, 2007) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
64-17-5	1000 ppm	-	-	-	-

8.2. Exposure controls

Personal protection measures, such as personal protective equipment

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 with protective sides 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))

Recommended properties :

- Impervious gloves in accordance with standard EN374

- Body protection

Avoid skin contact.

Wear suitable protective clothing.

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.

- Respiratory protection

Do not use in closed and not ventilated space

Avoid inhalation

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 :	78 °C.
Flash Point Interval :	16°C
Vapour pressure (50°C) :	Below 110 kPa (1.10 bar).
Density :	< 1
Water solubility :	Dilutable.
Viscosity:	v < 7 mm2/s (40°C)
Melting point/melting range :	Not relevant.
Self-ignition temperature :	370 °C.
Decomposition point/decomposition range :	370 °C.

9.2. Other information

No data available.

SECTION 10 : STABILITY AND REACTIVITY

10.1. Reactivity

No data available.

10.2. Chemical stability

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

10.3. Possibility of hazardous reactions

When exposed to high temperatures, the mixture can release hazardous decomposition products, such as carbon monoxide and dioxide, fumes and nitrogen oxide.

10.4. Conditions to avoid

Any apparatus likely to produce a flame or to have a metallic surface at high temperature (burners, electric arcs, furnaces etc.) must not be allowed on the premises.

Avoid :

- accumulation of electrostatic charges.
- heating
- heat
- flames and hot surfaces

10.5. Incompatible materials

10.6. Hazardous decomposition products

The thermal decomposition may release/form :

- carbon monoxide (CO)
- carbon dioxide (CO2)

SECTION 11 : TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

May have reversible effects on the eyes, such as eye irritation which is totally reversible by the end of observation at 21 days.

Splashes in the eyes may cause irritation and reversible damage

May cause an allergic reaction by skin contact.

11.1.1. Substances

Acute toxicity :

CARVONE (CAS: 99-49-0)

Dermal route :	LD50 = 3800 mg/kg

CINNAMIC ALDEHYDE * (CAS: 104-55-2)

Oral route :	LD50 = 2500 mg/kg
Dermal route :	LD50 = 1100 mg/kg

EUGENOL (CAS: 97-53-0)

Oral route :	LD50 = 2300 mg/kg

TRANS-ANETHOLE [(E)-ANETHOLE] (CAS: 4180-23-8)

Oral route :	LD50 = 3000 mg/kg

MENTHONE (CAS: 89-80-5)

Oral route :	LD50 = 2500 mg/kg

DELTA-3-CARENE (CAS: 13466-78-9)

Oral route :	LD50 = 4800 mg/kg

LINALOOL (CAS: 78-70-6)

Oral route :	LD50 = 2790 mg/kg

Serious damage to eyes/eye irritation :

ETHANOL (CAS: 64-17-5)

Causes serious eye irritation.

Corneal haze :	1 <= Average score < 2 and effects totally reversible within 21 days of observation

Conjunctival redness : 2 <= Average score < 2.5 and effects totally reversible within 21 days of observation

11.1.2. Mixture

No toxicological data available for the mixture.

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

CAS 97-53-0 : IARC Group 3 : The agent is not classifiable as to its carcinogenicity to humans.

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

CAS 64-17-5 : IARC Group 1 : The agent is carcinogenic to humans.

SECTION 12 : ECOLOGICAL INFORMATION

12.1. Toxicity

12.1.2. Mixtures

No aquatic toxicity data available for the mixture.

12.2. Persistence and degradability

No data available.

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 mixture and/or its container must be determined in accordance with Directive 2008/98/EC.

CONSIGN TO AN APPROVED COLLECTOR. CONSULT THE PREFECTORAL ORDERS IN FORCE.

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 2013 - IMDG 2012 - ICAO/IATA 2014).

14.1. UN number

1993

14.2. UN proper shipping name

UN1993=FLAMMABLE LIQUID, N.O.S.

(ethanol)

14.3. Transport hazard class(es)

- Classification :



3

14.4. Packing group

II

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
	3	F1	II	3	33	1 L	274 601 640D	E2	2	D/E

IMDG	Class	2°Label	Pack gr.	LQ	EMS	Provis.	EQ
	3	-	II	1 L	F-E,S-E	274	E2

IATA	Class	2°Label	Pack gr.	Passager	Passager	Cargo	Cargo	note	EQ
	3	-	II	353	5 L	364	60 L	A3	E2
	3	-	II	Y341	1 L	-	-	A3	E2

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 MARPOL73/78 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:

- Regulation EC 1272/2008 modified by regulation EC 618/2012
- EU Regulation No. 1272/2008 amended by EU Regulation No. 758/2013.

- Container information:

Containers to be fitted with a tactile warning of danger (see EC Regulation No. 1272/2008, Annex II, Part 3).

- Particular provisions :

No data available.

- Labelling for biocidal products (Regulation 1896/2000, 1687/2002, 2032/2003, 1048/2005, 1849/2006, 1451/2007 and Directive 98/8/EC) :

Name	CAS	%	Product-type
ETHANOL	64-17-5	708.03 g/kg	02
GERANIOL (naturally occuring in essential oils)	106-24-1	0.5 g/kg	18, 19

Product-type 2 : Disinfectants and algaecides not intended for direct application to humans or animals.

Product-type 18: Insecticides, acaricides and products to control other arthropods

Product-type 19: Repellents and attractants

15.2. Chemical safety assessment

No data available.

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.

The mixture must not be used for other uses than those specified in section 1 without having first obtained written handling instructions.

It is at all tim es the responsibility of th e user to take all necessary measures to comply with legal requirem ents and local regulations.

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

Title for H, EUH and R indications mentioned in section 3 :

H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H228	Flammable solid.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

Abbreviations :

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 : Wassergefahrdungsklasse (Water Hazard Class).
GHS02 : Flame
GHS07 : Exclamation mark

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