LODIGROUP
HYGIÈNE & BIOSÉCURITÉ

SAFETY DATA SHEET

(REACH regulation (EC) n° 1907/2006 - n° 2020/878)

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

1.1. Product identifier

Product name : ORIGIN RÉPULSIF PUNAISES DE LIT
UFI : 1PGV-915D-J006-3EWR

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

Recommended use(s): Repellent - biocidal use
Use(s) advised against: Do not use for purposes other than those stated in "Recommended use(s)"

Use descriptor system (REACH) :

Not available.

1.3. Details of the supplier of the safety data sheet

Registered company name : LODI S.A.S.
Address : PA des Quatre Routes.35390.Grand-Fougeray.FRANCE.
Telephone : 02.99.08.48.59. Fax : 02 99 08 38 68.
fds@lodi.fr
https://www.lodi-group.fr/

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

Association/Organisation : Centres antipoison : http://www.centres-antipoison.net..

Other emergency numbers

European poison Control Center: 112

|>SECTION 2 : HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

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

May produce an allergic reaction (EUH208).
This mixture does not present a physical hazard. Refer to the recommendations regarding the other products present on the site.
This mixture does not present an environmental hazard. No known or foreseeable environmental damage under standard conditions of use.

2.2. Label elements

Biocidal mixture (see section 15).

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

Additional labeling :
EUH208 Contains ALCOOL BENZYLIQUE. May produce an allergic reaction.
EUH210 Safety data sheet available on request.

2.3. Other hazards

The mixture does not contain substances classified as 'Substances of Very High Concern' (SVHC) >= 0.1% published by the European CHemicals Agency (ECHA) under article 59 of REACH: http://echa.europa.eu/fr/candidate-list-table
The mixture fulfils neither the PBT nor the vPvB criteria for mixtures in accordance with annexe XIII of the REACH regulations EC 1907/2006.
The mixture does not contain substances> = 0.1% with endocrine disrupting properties in accordance with the criteria of the Delegated Regulation (EU) 2017/2100 of the Commission or Regulation (EU) 2018/605 of the Commission.

|>SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

|> Composition :

Identification	Classification (EC) 1272/2008	Note	%
INDEX: 52304_36_6 CAS: 52304-36-6 EC: 257-835-0 ETHYL BUTYLACETYLAMINOPROPIONATE	GHS07 Wng Eye Irrit. 2, H319		2.5 <= x % < 10
INDEX: 101_51_6A CAS: 100-51-6 EC: 202-859-9 ALCOOL BENZYLIQUE	GHS07 Wng Acute Tox. 4, H302 Skin Sens. 1B, H317 Eye Irrit. 2, H319		0 <= x % < 2.5

|> Specific concentration limits:

Identification	Specific concentration limits	ATE
INDEX: 52304_36_6 CAS: 52304-36-6 EC: 257-835-0 ETHYL BUTYLACETYLAMINOPROPIONATE		oral: ATE = 14000 mg/kg BW
INDEX: 101_51_6A CAS: 100-51-6 EC: 202-859-9 ALCOOL BENZYLIQUE		dermal: ATE = 2500 mg/kg BW oral: ATE = 1200 mg/kg BW

Nanoform

Not available.

Information on ingredients :

(Full text of H-phrases: see section 16)

|>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 :

Remove casualty to fresh air and keep warm and at rest. Seek mediacl attention if difficulties appear and persist.

In the event of splashes or contact with eyes :

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

In the event of splashes or contact with skin :

In case of skin exposure, clean skin with water then with soap. Seek medical attention if irritation or discomfort develops

|> In the event of swallowing :

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, 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

Specific and immediate treatment :

Treat symptomatically.

Information for the doctor :

Treat symptomatically.

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

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

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 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 mixture is handled.

|> 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.

Fire prevention :

Handle in well-ventilated areas.

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.

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

Prohibited equipment and procedures :

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

7.2. Conditions for safe storage, including any incompatibilities

No data available.

Storage

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

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.

Recommended types of packaging :

Original packaging.

Suitable packaging materials :

Original packaging.

Unsuitable packaging materials :

Different that the original packaging.

7.3. Specific end use(s)

No data available.

|>SECTION 8 : EXPOSURE CONTROLS/PERSONAL PROTECTION

|> 8.1. Control parameters

No data available.

|> Derived no effect level (DNEL) or derived minimum effect level (DMEL):

ALCOOL BENZYLIQUE (CAS: 100-51-6)

	> **Final use:**	**Workers.**
	Exposure method:	Dermal contact.
	Potential health effects:	Short term systemic effects.
	DNEL :	40 mg/kg body weight/day
	Exposure method:	Dermal contact.

Potential health effects:	Long term systemic effects.
DNEL :	8 mg/kg body weight/day
Exposure method:	Inhalation.
Potential health effects:	Short term systemic effects.
DNEL :	110 mg of substance/m3
Exposure method:	Inhalation.
Potential health effects:	Long term systemic effects.
DNEL :	22 mg of substance/m3

|> Final use: Consumers.

Exposure method:	Ingestion.
Potential health effects:	Long term systemic effects.
DNEL :	4 mg/kg body weight/day
Exposure method:	Ingestion.
Potential health effects:	Short term systemic effects.
DNEL :	20 mg/kg body weight/day
Exposure method:	Dermal contact.
Potential health effects:	Long term systemic effects.
DNEL :	4 mg/kg body weight/day
Exposure method:	Dermal contact.
Potential health effects:	Short term systemic effects.
DNEL :	20 mg/kg body weight/day
Exposure method:	Inhalation.
Potential health effects:	Long term systemic effects.
DNEL :	5.4 mg of substance/m3
Exposure method:	Inhalation.
Potential health effects:	Short term systemic effects.
DNEL :	27 mg of substance/m3

|> Predicted no effect concentration (PNEC):

ALCOOL BENZYLIQUE (CAS: 100-51-6)

Environmental compartment:	Soil.
PNEC :	0.456 mg/kg
Environmental compartment:	Fresh water.
PNEC :	1 mg/l
Environmental compartment:	Sea water.
PNEC :	0.1 mg/l
Environmental compartment:	Intermittent waste water.
PNEC :	2.3 mg/l
Environmental compartment:	Fresh water sediment.
PNEC :	5.27 mg/kg
Environmental compartment:	Marine sediment.
PNEC :	0.527 mg/kg
Environmental compartment:	Waste water treatment plant.
PNEC :	39 mg/l

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 ISO 16321.

|> - Hand protection

Wear suitable protective gloves in the event of prolonged or repeated skin contact.

Use suitable protective gloves that are resistant to chemical agents in accordance with standard EN ISO 374-1.

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 :

- PVA (Polyvinyl alcohol)
- Butyl Rubber (Isobutylene-isoprene copolymer)
- Natural latex
- Nitrile rubber (butadiene-acrylonitrile copolymer rubber (NBR))
- PVC (polyvinyl chloride)

- Body protection

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.

|>SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state

Physical state :	Fluid liquid.

Colour

Colour:	pale yellow

Odour

Odour threshold :	Not stated.

Melting point

Melting point/melting range :	Not relevant.

Freezing point

Freezing point / Freezing range :	Not stated.

Boiling point or initial boiling point and boiling range

Boiling point/boiling range :	Not relevant.

|> Flammability

Flammability (solid, gas) :	Not stated.

Lower and upper explosion limit

Explosive properties, lower explosivity limit (%) :	Not stated.
Explosive properties, upper explosivity limit (%) :	Not stated.

Flash point

Flash point interval :	Not relevant.

Auto-ignition temperature

Self-ignition temperature :	Not relevant.

|> Decomposition temperature

Decomposition point/decomposition range :	Not relevant.

|> pH

pH (aqueous solution) :	Not stated.
pH :	5.71 . Neutral.

Kinematic viscosity

Viscosity :	Not stated.

Solubility

Water solubility :	Dilutable.
Fat solubility :	Not stated.

Partition coefficient n-octanol/water (log value)
Partition coefficient: n-octanol/water : Not stated.

|> Vapour pressure
Vapour pressure (50°C) : Not relevant.

Density and/or relative density
Density : 1.0091

Relative vapour density
Vapour density : Not stated.

9.2. Other information
No data available.

9.2.1. Information with regard to physical hazard classes
No data available.

9.2.2. Other safety characteristics
No data available.

SECTION 10 : STABILITY AND REACTIVITY

10.1. Reactivity
Stable under normal conditions.

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
Avoid :
- frost

10.5. Incompatible materials
None.

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

11.1.1. Substances

|> a) Acute toxicity :

ALCOOL BENZYLIQUE (CAS: 100-51-6)

Oral route :	LD50 = 1200 mg/kg body weight Species : Rat
Dermal route :	LD50 = 2500 mg/kg body weight
Inhalation route (Vapours) :	LC50 > 5.4 mg/l Species : Rat

ETHYL BUTYLACETYLAMINOPROPIONATE (CAS: 52304-36-6)

Oral route :	LD50 = 14000 mg/kg body weight Species : Rat
Dermal route :	LD50 > 10000 mg/kg body weight Species : Rat
Inhalation route (Dusts/mist) :	LC50 > 5.1 mg/l Species : Rat OECD Guideline 403 (Acute Inhalation Toxicity) Duration of exposure : 4 h

b) Skin corrosion/skin irritation :
No data available.

c) Serious damage to eyes/eye irritation :

No data available.

d) Respiratory or skin sensitisation :

No data available.

|> e) Germ cell mutagenicity :

ETHYL BUTYLACETYLAMINOPROPIONATE (CAS: 52304-36-6)

Ames test (in vitro) :	Negative.

ALCOOL BENZYLIQUE (CAS: 100-51-6)

Mutagenesis (in vivo) :	Negative.
Mutagenesis (in vitro) :	Negative. Species : Bacteria OECD Guideline 471 (Bacterial Reverse Mutation Assay)
Ames test (in vitro) :	Negative.

|> f) Carcinogenicity :

ALCOOL BENZYLIQUE (CAS: 100-51-6)

Carcinogenicity Test :	Negative. No carcinogenic effect. Species : Rat OECD Guideline 451 (Carcinogenicity Studies)

g) Reproductive toxicant :

No data available.

|> h) Specific target organ systemic toxicity - single exposure :

ALCOOL BENZYLIQUE (CAS: 100-51-6)

Oral route :	C = 400 mg/kg body weight Species : Rat
Inhalation route :	C = 1072 mg/l/4h Species : Rat

|> i) Specific target organ systemic toxicity - repeated exposure :

ALCOOL BENZYLIQUE (CAS: 100-51-6)

Oral route :	C = 400 mg/kg body weight/day Species : Rat Duration of exposure : 90 days OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)

j) Aspiration hazard :

No data available.

|> 11.1.2. Mixture

11.1.2.1 Information on hazard classes

|> a) Acute toxicity :

Oral route :	No data available.
Dermal route :	No data available.
Inhalation route (Dusts/mist) :	No data available.

|> b) Skin corrosion/skin irritation :

Repeated or prolonged contact with the mixture may cause removal of natural oil from the skin resulting in non-allergic contact dermatitis and absorption through the skin.

c) Serious damage to eyes/eye irritation :

Splashes in the eyes may cause irritation and reversible damage

|> d) Respiratory or skin sensitisation :

Contains at least one sensitising substance. May cause an allergic reaction.

e) Germ cell mutagenicity :

No data available.

f) Carcinogenicity :

No data available.

g) Reproductive toxicant :

No data available.

h) Specific target organ systemic toxicity - single exposure :

No data available.

i) Specific target organ systemic toxicity - repeated exposure :

No data available.

j) Aspiration hazard :

No data available.

11.1.2.2 Other information

|> Symptoms related to the physical, chemical and toxicological characteristics

Exposure to vapours from solvents in the mixture in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on kidney, liver and central nervous system.

Symptoms produced will include headaches, numbness, dizziness, fatigue, muscular asthenia and, in extreme cases, loss of consciousness.

11.2. Information on other hazards

|> Endocrine disrupting properties

The mixture does not contain any substance evaluated as an endocrine disruptor with effects on human health.

|>SECTION 12 : ECOLOGICAL INFORMATION

12.1. Toxicity

|> 12.1.1. Substances

ALCOOL BENZYLIQUE (CAS: 100-51-6)

Fish toxicity :	LC50 = 460 mg/l Species : Pimephales promelas Duration of exposure : 96 h OECD Guideline 203 (Fish, Acute Toxicity Test)
Crustacean toxicity :	EC50 = 230 mg/l Species : Daphnia magna Duration of exposure : 48 h OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
	NOEC = 51 mg/l Species : Daphnia magna Duration of exposure : 21 days OECD Guideline 211 (Daphnia magna Reproduction Test)
Algae toxicity :	ECr50 = 770 mg/l Duration of exposure : 72 h OECD Guideline 201 (Alga, Growth Inhibition Test)
	NOEC = 310 mg/l Species : Pseudokirchnerella subcapitata Duration of exposure : 72 h OECD Guideline 201 (Alga, Growth Inhibition Test)

ETHYL BUTYLACETYLAMINOPROPIONATE (CAS: 52304-36-6)

Fish toxicity :	LC50 > 100 mg/l Species : Danio rerio Duration of exposure : 96 h OECD Guideline 203 (Fish, Acute Toxicity Test)
Crustacean toxicity :	EC50 > 100 mg/l Species : Daphnia magna Duration of exposure : 48 h OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Algae toxicity :	ECr50 > 100 mg/l Species : Desmodesmus subspicatus Duration of exposure : 72 h OECD Guideline 201 (Alga, Growth Inhibition Test)

12.1.2. Mixtures

No aquatic toxicity data available for the mixture.

12.2. Persistence and degradability

|> 12.2.1. Substances

ALCOOL BENZYLIQUE (CAS: 100-51-6)
Biodegradability : Rapidly degradable.

ETHYL BUTYLACETYLAMINOPROPIONATE (CAS: 52304-36-6)
Biodegradability : Non-rapidly degradable.

12.3. Bioaccumulative potential

|> 12.3.1. Substances

ALCOOL BENZYLIQUE (CAS: 100-51-6)
Octanol/water partition coefficient : log Koe = 1.10

ETHYL BUTYLACETYLAMINOPROPIONATE (CAS: 52304-36-6)
Octanol/water partition coefficient : log Koe = 1.7
OECD Guideline 117 (Partition Coefficient (n-octanol / water), HPLC Method)

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

No data available.

|> 12.6. Endocrine disrupting properties

The mixture does not contain any substance evaluated as an endocrine disruptor with environmental effects.

12.7. 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.

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, 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

Not classified as dangerous in the meaning of transport regulations.

14.1. UN number or ID number

-

14.2. UN proper shipping name

-

14.3. Transport hazard class(es)

-

14.4. Packing group

-

14.5. Environmental hazards

-

14.6. Special precautions for user

-

14.7. Maritime transport in bulk according to IMO instruments

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|>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. 2023/707.
- EU Regulation No. 1272/2008 amended by EU Regulation No. 2024/2564. (ATP 22)

Container information:

No data available.

Particular provisions :

No data available.

Restrictions applied under Title VIII of Regulation (EC) No. 1907/2006 (REACH):

The mixture does not contain any substance restricted under Annex XVII of Regulation (EC) No. 1907/2006 (REACH): https://echa.europa.eu/substances-restricted-under-reach.

|> Authorisations agreed under Title VII of Regulation (EC) No.1907/2006 (REACH):

The mixture does not contain any substance subject to authorisation according to Annex XIV of REACH Regulation (EC) No 1907/2006: https://echa.europa.eu/fr/authorisation-list.

|> Substances that deplete the ozone layer (EC Regulation No. 1005/2009, Montreal Protocol) :

The mixture does not contain any substance posing a risk to the ozone layer.

Persistent organic pollutants (POP) (Regulation (EU) 2019/1021):

The mixture does not contain a persistent organic pollutant.

|> PIC Regulation (EU) No 649/2012 concerning the export and import of hazardous chemicals (Rotterdam Convention):

The mixture is not subject to the Prior Informed Consent (PIC) procedure.

Explosives precursors :

The mixture does not contain any substance subject to Regulation (EU) 2019/1148 on the marketing and use of explosives precursors.

|> Labelling for biocidal products (Regulation (UE) n° 528/2012) :

Name	CAS	%	Product-type
ETHYL BUTYLACETYLAMINOPROPIONATE	52304-36-6	25.00 g/kg	19
GERANIOL	106-24-1	0.10 g/kg	19

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 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 mixture and not as a guarantee of the properties thereof.

|> Wording of the phrases mentioned in section 3 :

H302	Harmful if swallowed.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.

|> Abbreviations and acronyms :

LD50 : The dose of a test substance resulting in 50% lethality in a given time period.
LC50 : The concentration of a test substance resulting in 50% lethality in a given period.
EC50 : The effective concentration of substance that causes 50% of the maximum response.
ECr50 : The effective concentration of substance that causes 50% reduction in growth rate.
NOEC : The concentration with no observed effect.
REACH : Registration, Evaluation, Authorization and Restriction of Chemical Substances.
ATE : Acute Toxicity Estimate
BW : Body Weight
DNEL : Derived No-Effect Level
PNEC : Predicted No-Effect Concentration
UFI : Unique formulation identifier.
STEL : Short-term exposure limit
TWA : Moyenne pondérée dans le temps

TLV : Threshold Limit Value (exposure)
AEV : Average Exposure Value.
ADR : European agreement concerning the international carriage of dangerous goods by Road.
IATA : International Air Transport Association.
IMDG : International Maritime Dangerous Goods.
ICAO : International Civil Aviation Organisation
PBT: Persistent, bioaccumulable and toxic.
PIC: Prior Informed Consent.
POP: Persistent Organic Pollutant.
RID : Regulations concerning the International carriage of Dangerous goods by rail.
SVHC : Substances of very high concern.
AK-ertek : Permissible average concentration
WGK : Wassergefahrdungsklasse (Water Hazard Class).
|> Modification compared to the previous version