



Safety Data Sheet dated 10/01/2017, version 2

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

### 1.1. Product identifier

Trade name: AURODIL SUPER PB+

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

Recommended use:

Insecticide - Biocidal use

Uses advised against:

Do not use for purposes other than those stated in "Recommended uses"

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

Company:

Lodi Group - Parc d'Activités des Quatre Routes  
35390 Grand Fougeray - France Tel 0033 (0) 2.99.08.48.59

Competent person responsible for the safety data sheet:

[fds@lodi.fr](mailto:fds@lodi.fr)

### 1.4. Emergency telephone number

FRANCE BNPC: 0033 (0)3 83 32 36 36

Liste des centres anti-poisons de France: <http://www.centres-antipoison.net>

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

Directive criteria, 67/548/CE, 99/45/EC and following amendments thereof:

Properties / Symbols:

Xn Harmful

Xi Irritant

N Dangerous for the environment

R Phrases:


R20/22 Harmful by inhalation and if swallowed.

R43 May cause sensitization by skin contact.

R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.


R65 Harmful: may cause lung damage if swallowed.

EC regulation criteria 1272/2008 (CLP)


 Warning, Acute Tox. 4, Harmful if swallowed.

 Warning, Eye Irrit. 2, Causes serious eye irritation.

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

 Danger, Asp. Tox. 1, May be fatal if swallowed and enters airways.

 Warning, Aquatic Acute 1, Very toxic to aquatic life.

 Warning, Aquatic Chronic 1, Very toxic to aquatic life with long lasting effects.

## Safety Data Sheet AURODIL SUPER PB+

Adverse physicochemical, human health and environmental effects:  
No other hazards

### 2.2. Label elements

Symbols:



Danger

Hazard statements:

- H302 Harmful if swallowed.
- H319 Causes serious eye irritation.
- H317 May cause an allergic skin reaction.
- H304 May be fatal if swallowed and enters airways.
- H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements:

- P261 Avoid breathing dust or mist.
- P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
- P302+P352 IF ON SKIN: Wash with plenty of soap and water.
- P305+P351+P338 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.
- P501 Dispose of contents/container in accordance with applicable regulations.

Special Provisions:

None

Contents

permethrin (ISO); m-phenoxybenzyl  
D-Trans-Allethrin  
Hydrocarbones en C11-C13, <2%aromatiques  
Solvent naphtha (petroleum), heavy arom.; Kerosine "unspecified"; [A complex combination of hydrocarbons obtained from distillation of aromatic streams. It consists predominantly

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

This SDS concerns a mixture, see 3.2.

### 3.2. Mixtures





Hazardous components within the meaning of EEC directive 67/548 and CLP regulation and related classification:

250g/L permethrin (ISO); m-phenoxybenzyl  
3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate  
Index number: 613-058-00-2, CAS: 52645-53-1, EC: 258-067-9  
Xn,Xi,N; R20/22-43-50/53



3.4.2/1-1A-1B Skin Sens. 1, 1A, 1B H317




## Safety Data Sheet AURODIL SUPER PB+

-  4.1/A1 Aquatic Acute 1 H400
-  4.1/C1 Aquatic Chronic 1 H410
-  3.1/4/Oral Acute Tox. 4 H302
-  3.1/4/Inhal Acute Tox. 4 H332

150g/L Piperonyl butoxide  
CAS: 51-03-6, EC: 200-076-7  
N; R50/53

-  4.1/C1 Aquatic Chronic 1 H410



20g/L D-Trans-Allethrin  
CAS: 260359-57-7

-  3.1/4/Inhal Acute Tox. 4 H332
-  3.1/4/Oral Acute Tox. 4 H302
-  4.1/C1 Aquatic Chronic 1 H410






15-20 % Hydrocarbones en C11-C13, <2%aromatiques  
CAS: 90622-58-5, EC: 292-460-6  
Xn; R65-66

-  3.10/1 Asp. Tox. 1 H304

< 5 % AlkylC10-C14 benzene sulfonate de calcium  
CAS: 90194-26-6, EC: 290-635-1  
Xi; R38-41

-  3.2/2 Skin Irrit. 2 H315
-  3.3/1 Eye Dam. 1 H318

0.25-1 % 2-methylpropan-1-ol; iso-butanol  
Index number: 603-108-00-1, CAS: 78-83-1, EC: 201-148-0  
Xi; R10-37/38-41-67

-  2.6/3 Flam. Liq. 3 H226
-  3.8/3 STOT SE 3 H335
-  3.2/2 Skin Irrit. 2 H315
-  3.3/1 Eye Dam. 1 H318
-  3.8/3 STOT SE 3 H336

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## **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.

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:

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

In case of Ingestion:

Do NOT induce vomiting.

Give nothing to eat or drink.

In case of Inhalation:

If breathing is irregular or stopped, administer artificial respiration.

In case of inhalation, consult a doctor immediately and show him packing or label.

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

May cause sensitization by skin contact.

Vapours may cause drowsiness and dizziness

Ingestion: may cause lung damage if swallowed (chemical pneumonia due to aspiration into the lungs during swallowing).

### **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

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## **SECTION 5: Firefighting measures**

### **5.1. Extinguishing media**

Suitable extinguishing media:

Water.

Carbon dioxide (CO<sub>2</sub>).

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.

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## **SECTION 6: Accidental release measures**

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

Wear personal protection equipment.

Wear breathing apparatus if exposed to vapours/dusts/aerosols.

## Safety Data Sheet

### AUODIL SUPER PB+

Provide adequate ventilation.  
Use appropriate respiratory protection.  
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

Rapidly recover the product. To do so, wear a mask and protective clothing.  
Wash with plenty of water.

#### 6.4. Reference to other sections

See also section 8 and 13

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### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.  
Use localized ventilation system.  
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 in a dry and cool place.  
Always keep the containers tightly closed.  
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

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### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

2-methylpropan-1-ol; iso-butanol - CAS: 78-83-1  
TLV TWA - 50 ppm - 151,57 mg/m<sup>3</sup>  
DNEL Exposure Limit Values  
N.A.  
PNEC Exposure Limit Values  
N.A.

#### 8.2. Exposure controls

Eye protection:  
Not needed for normal use. Anyway, operate according good working practices.  
Protection for skin:

## Safety Data Sheet AURODIL SUPER PB+

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

Protection for hands:

Respiratory protection:

In case of volumes treatments, wear appropriate respiratory apparatus (filtering device)

Thermal Hazards:

None

Environmental exposure controls:

Avoid release in watercourses and sewers

### SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

Appearance and colour:	Yellow brown liquid
Odour:	Light
Odour threshold:	N.A.
pH:	5,38
Melting point / freezing point:	N.A.
Initial boiling point and boiling range:	N.A.
Solid/gas flammability:	N.A.
Upper/lower flammability or explosive limits:	N.A.
Vapour density:	N.A.
Flash point:	>60°C
Evaporation rate:	N.A.
Vapour pressure:	N.A.
Relative density:	0,983
Solubility in water:	N.A.
Solubility in oil:	N.A.
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

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.

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**SECTION 11: Toxicological information**

**11.1. Information on toxicological effects**

Toxicological information of the mixture:

N.A.

Toxicological information of the main substances found in the mixture:

Permethrin (ISO); m-phenoxybenzyl

3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate - CAS: 52645-53-1

a) acute toxicity:

Test: LD50 - Route: oral - Species: Rat : > 2000 mg/Kg

Test: LD50 - Route: dermal - Species: Rat : > 2000 mg/Kg

Test: LC50 - Route: Inhalation - Species: Rat : > 0.45 mg/L

D-Trans-Allethrin - CAS: 260359-57-7

a) acute toxicity:

Test: LD50 - Route: oral - Species: Rat : = 500 mg/kg b.w

Test: LD50 - Route: dermal - Species: Rat : > 2000 mg/kg b.w

Test: LD50 - Route: Inhalation - Species: Rat : = 2.87 mg/L

If not differently specified, the information required in Regulation 453/2010/EC 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.

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**SECTION 12: Ecological information**

**12.1. Toxicity**

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

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

permethrin (ISO); m-phenoxybenzyl

3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate - CAS: 52645-53-1

a) Aquatic acute toxicity:

Endpoint: LC50 Fish = 0.0089 mg/L - Duration h: 96

Endpoint: LC50 Daphnia = 0.020 mg/L - Duration h: 24

Endpoint: EC50 Algae > 0.011 mg/L - Duration h: 72

D-Trans-Allethrin - CAS: 260359-57-7

a) Aquatic acute toxicity:

Endpoint: LC50 Fish = 0.0086 mg/L - Duration h: 96

Endpoint: EC50 Daphnia magna = 0.0095 mg/L - Duration h: 48

Endpoint: EC50 Algae = 2.9 mg/L - Duration h: 72

**12.2. Persistence and degradability**

N.A.

## Safety Data Sheet AURODIL SUPER PB+

### 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

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## 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.

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## SECTION 14: Transport information

### 14.1. UN number

ADR-UN number: 3082

### 14.2. UN proper shipping name

ADR-Shipping Name: UN3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S (permethrin),9

### 14.3. Transport hazard class(es)

ADR-Class: 9

### 14.4. Packing group

ADR-Packing Group: III

### 14.5. Environmental hazards

N.A.

### 14.6. Special precautions for user

N.A.

### 14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

N.A.

*Product eligible for exemption under the special provisions A197 (IATA), 375 (ADR) and section 2.10.2.7 (IMDG)*

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## SECTION 15: Regulatory information

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Dir. 67/548/EEC (Classification, packaging and labelling of dangerous substances)

Dir. 99/45/EC (Classification, packaging and labelling of dangerous preparations)

Dir. 98/24/EC (Risks related to chemical agents at work)

Dir. 2000/39/EC (Occupational exposure limit values)

Dir. 2006/8/EC

Regulation (EC) n. 1907/2006 (REACH)

Regulation (EC) n. 1272/2008 (CLP)

Regulation (EC) n. 790/2009 (ATP 1 CLP)

Regulation (EU) n. 453/2010 (Annex I)





**Safety Data Sheet**  
**AUODIL SUPER PB+**

Regulation (EU) n. 286/2011 (ATP 2 CLP)

## Safety Data Sheet AURODIL SUPER PB+

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

Restriction 3

Restriction 40

Where applicable, refer to the following regulatory provisions :

Directive 2003/105/CE ('Activities linked to risks of serious accidents') and subsequent amendments.

Regulation (EC) nr 648/2004 (detergents).

1999/13/EC (VOC directive)

### 15.2. Chemical safety assessment

No

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### SECTION 16: Other information

Full text of phrases referred to in Section 3:

R10 Flammable.

R20/22 Harmful by inhalation and if swallowed.

R37/38 Irritating to respiratory system and skin.

R38 Irritating to skin.

R41 Risk of serious damage to eyes.

R43 May cause sensitization by skin contact.

R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R65 Harmful: may cause lung damage if swallowed.

R66 Repeated exposure may cause skin dryness or cracking.

R67 Vapours may cause drowsiness and dizziness.

H317 May cause an allergic skin reaction.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

H302 Harmful if swallowed.

H332 Harmful if inhaled.

H304 May be fatal if swallowed and enters airways.

H315 Causes skin irritation.

H318 Causes serious eye damage.

H226 Flammable liquid and vapour.

H335 May cause respiratory irritation.

H336 May cause drowsiness or dizziness.

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

CCNL - Appendix 1

Insert further consulted bibliography

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.

## Safety Data Sheet AURODIL SUPER PB+

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.
CAS:	Chemical Abstracts Service (division of the American Chemical Society).
CLP:	Classification, Labeling, Packaging.
CSR:	Chemical safety report
DNEL:	Derived No Effect Level.
EC50 :	Efficacy concentration for 50 percent of the tested population.
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.
LTE:	Long-term exposure.
N.A.:	Not available
PNEC:	Predicted No Effect Concentration.
RID:	Regulation Concerning the International Transport of Dangerous Goods by Rail.
STE:	Short-term exposure.
STEL:	Short Term Exposure limit.
STOT:	Specific Target Organ Toxicity.
TLV:	Threshold Limiting Value.
TWATLV:	Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).
UN:	United Nations
WGK:	German Water Hazard Class.