



Safety Data Sheet dated 28/4/2015, version 1

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

### 1.1. Product identifier

Trade name: **DIGRAIN CONTROL**

### 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 UK

Pensnett Trading Estate 3rd Avenue

West Midlands

DY6 7FD KINGSWINFORD United Kingdom

Tel. 00 44 1628 779 027

Competent person responsible for the safety data sheet:

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

### 1.4. Emergency telephone number

NPIS (National Poison Centre) - Birmingham Unit

[To be called by medical staff or physicians]

City Hospital, Birmingham, B18 7QH, UK

Tel: 0844 892 011

## 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:


N Dangerous for the environment

R Phrases:


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


R66 Repeated exposure may cause skin dryness or cracking.

EC regulation criteria 1272/2008 (CLP)

 Danger, Aerosols 1, Extremely flammable aerosol. Pressurized container: may burst if heated.

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

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

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

Adverse physicochemical, human health and environmental effects:

No other hazards

### 2.2. Label elements

Symbols:



Danger

Hazard statements:

H222+H229 Extremely flammable aerosol. Pressurized container: may burst if heated.

H319 Causes serious eye irritation.

H410 Very toxic to aquatic life with long lasting effects.

EUH066 Repeated exposure may cause skin dryness or cracking

Precautionary statements:

P102 Keep out of reach of children.

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P211 Do not spray on an open flame or other ignition source.

P251 Do not pierce or burn, even after use.

P273 Avoid release to the environment.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122°F.

Special Provisions:

None

Contents

Permethrin: 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

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## 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:

1,70% Piperonyl Butoxide

REACH No.: 01-2119537431-046, CAS: 51-03-6, EC: 200-076-7

N; R50/53

 4.1/A1 Aquatic Acute 1 H400


 4.1/C1 Aquatic Chronic 1 H410


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0,24% Permethrin

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

 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

0,23% Tetraméthrine

CAS: 7696-12-0, EC: 231-711-6

N; R50/53

 4.1/A1 Aquatic Acute 1 H400

 4.1/C1 Aquatic Chronic 1 H410

>= 15% - < 20% Hydrocarbures, C11-C14, n-alcanes, isoalcanes, cycliques, <2% aromatiques

REACH No.: 01-2119456620-43, CAS: 64742-47-8, EC: 926-141-6


Xn; R65-66

 3.10/1 Asp. Tox. 1 H304

>= 5% - < 7% propan-2-ol; isopropyl alcohol; isopropanol

Index number: 603-117-00-0, CAS: 67-63-0, EC: 200-661-7

F,Xi; R11-36-67

 2.6/2 Flam. Liq. 2 H225


 3.3/2 Eye Irrit. 2 H319

 3.8/3 STOT SE 3 H336

>= 5% - < 7% propane

Index number: 601-003-00-5, CAS: 74-98-6, EC: 200-827-9


F+; R12; substance with a Community workplace exposure limit

 2.2/1 Flam. Gas 1 H220

>= 5% - < 7% acetone; propan-2-one; propanone

Index number: 606-001-00-8, CAS: 67-64-1, EC: 200-662-2

F,Xi; R11-36-66-67

 2.6/2 Flam. Liq. 2 H225

 3.3/2 Eye Irrit. 2 H319

 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:

Wash with plenty of water and soap.

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 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**

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.

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**

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.  
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.  
Keep away from heat and direct sunlight.  
Store in original container, tightly closed  
Keep out of reach of children  
Store away from: open flame, direct sunlight, sparks, heat.  
Do not smoke  
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

propan-2-ol; isopropyl alcohol; isopropanol - CAS: 67-63-0  
ACGIH, 200 ppm, 400 ppm - Notes: A4, BEI - Eye and URT irr, CNS impair  
propane - CAS: 74-98-6  
TLV TWA - 1000 ppm - 0 mg/m<sup>3</sup>  
acetone; propan-2-one; propanone - CAS: 67-64-1  
EU - LTE(8h): 1210 mg/m<sup>3</sup>, 500 ppm - Notes: Bold-type: Indicative Occupational Exposure Limit Values [2,3] and Limit Values for Occupational Exposure [4] (for references see bibliography)  
ACGIH, 500 ppm, 750 ppm - Notes: (A4), BEI - (URT and eye irr, CNS impair, hematologic eff)  
DNEL Exposure Limit Values  
N.A.  
PNEC Exposure Limit Values  
N.A.

### 8.2. Exposure controls

Eye protection:  
Eye protection is required only if there is a risk of splashing or spraying liquid.  
Protection for skin:  
Avoid contact with skin

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Protection for hands:  
     Wear gloves  
     Wash hands after handling.

Respiratory protection:  
     Not needed for normal use.

Thermal Hazards:  
     None

Environmental exposure controls:  
     Avoid release in the environment  
     Avoid release in watercourses and sewers

### SECTION 9: Physical and chemical properties

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

Appearance and colour:	Liquid in aerosol
Odour:	N.A.
Odour threshold:	N.A.
pH:	N.A.
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:	N.A.
Evaporation rate:	N.A.
Vapour pressure:	N.A.
Relative density:	<1
Solubility in water:	insoluble
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:

Piperonyl Butoxide - CAS: 51-03-6

a) acute toxicity:

Test: LD50 - Route: oral - Species: Rat : = 4570-7720 mg/Kg

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

Test: LC50 - Route: Inhalation - Species: Rat : > 5.9 mg/L - Duration: 4h

Permethrin - 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

acetone; propan-2-one; propanone - CAS: 67-64-1

LD50 (RABBIT) ORAL: 5300 MG/KG

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.

Piperonyl Butoxide - CAS: 51-03-6

a) Aquatic acute toxicity:

Endpoint: EC50 Daphnia = 0.51 mg/L - Duration h: 48

Permethrin - 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

Tetraméthrine - CAS: 7696-12-0

a) Aquatic acute toxicity:

Endpoint: LC50 Fish = 0.0037 mg/L - Duration h: 96

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Endpoint: EC50 Daphnia magna = 0.110 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

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## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Recover if possible. 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: 1950

### 14.2. UN proper shipping name

ADR-Shipping Name: UN1950 Aerosols, flammable, 2.1, 5F

### 14.3. Transport hazard class(es)

ADR-Class: 2.1

### 14.4. Packing group

5F

### 14.5. Environmental hazards

Hazardous to environment

### 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.

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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)



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Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013

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

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

Regulation (EU) n. 618/2012 (ATP 3 CLP)

Regulation (EU) n. 487/2013 (ATP 4 CLP)

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

Restrictions related to the product:

Restriction 3

Restriction 40

Restrictions related to the substances contained:

No restriction.

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)

Provisions related to directives 82/501/EC(Seveso), 96/82/EC(Seveso II):

N.A.

### 15.2. Chemical safety assessment

No

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### SECTION 16: Other information

Full text of phrases referred to in Section 3:

R11 Highly flammable.

R12 Extremely flammable.

R20/22 Harmful by inhalation and if swallowed.

R36 Irritating 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.

H304 May be fatal if swallowed and enters airways.

H225 Highly flammable liquid and vapour.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

H220 Extremely flammable gas.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

H317 May cause an allergic skin reaction.

H302 Harmful if swallowed.

H332 Harmful if inhaled.

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

## Safety Data Sheet DIGRAIN CONTROL

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.
CAS:	Chemical Abstracts Service (division of the American Chemical Society).
CLP:	Classification, Labeling, Packaging.
CSR:	Chemical safety report
DNEL:	Derived No Effect Level.
EC50:	
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.