



Safety Data Sheet dated 18/7/2018, version 2

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 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

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:

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

Hazard pictograms:

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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.

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

Contains

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

SECTION 2: Hazards identification




SECTION 3: Composition/information on ingredients

3.1. Substances

















Not available

3.2. Mixtures

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

Qty	Name	Ident. Number	Classification
< 50%	Butane - contenant <=0,1% de butadiène (203-450-8)	Index number: 601-004-00-0 CAS: 106-97-8 EC: 203-448-7	 2.2/1 Flam. Gas 1 H220
< 20%	Isobutane - contenant <= 0,1%de butadiène (203-450-8)	Index number: 601-004-00-0 CAS: 75-28-5 EC: 200-857-2	 2.2/1 Flam. Gas 1 H220
< 20%	Hydrocarbures, C11-C14, n-alcanes,	CAS: 64742-47-8 EC: 926-141-6	 3.10/1 Asp. Tox. 1 H304 EUH066

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	isoalcanes, cycliques, <2% aromatiques		
< 7%	propan-2-ol; isopropyl alcohol; isopropanol	Index number: CAS: EC:	603-117-00-0 67-63-0 200-661-7
			 2.6/2 Flam. Liq. 2 H225  3.3/2 Eye Irrit. 2 H319  3.8/3 STOT SE 3 H336
< 7%	propane	Index number: CAS: EC:	601-003-00-5 74-98-6 200-827-9
			 2.2/1 Flam. Gas 1 H220
< 7%	acetone; propan-2-one; propanone	Index number: CAS: EC:	606-001-00-8 67-64-1 200-662-2
			 2.6/2 Flam. Liq. 2 H225  3.3/2 Eye Irrit. 2 H319  3.8/3 STOT SE 3 H336 EUH066
1.70% w/w	Piperonyl Butoxide	CAS: EC:	51-03-6 200-076-7
			 4.1/A1 Aquatic Acute 1 H400  4.1/C1 Aquatic Chronic 1 H410
0.25% w/w	Permethrin	Index number: CAS: EC:	613-058-00-2 52645-53-1 258-067-9
			 3.4.2/1-1A-1B Skin Sens. 1,1A,1B H317  4.1/A1 Aquatic Acute 1 H400 M=1000.  4.1/C1 Aquatic Chronic 1 H410 M=1000.  3.1/4/Oral Acute Tox. 4 H302  3.1/4/Inhal Acute Tox. 4 H332
0.24% w/w	Tetraméthrine	CAS: EC:	7696-12-0 231-711-6
			 4.1/A1 Aquatic Acute 1 H400  4.1/C1 Aquatic Chronic 1 H410

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:

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:

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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:

CO2 or Dry chemical fire extinguisher.

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 all sources of ignition.

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

SECTION 7: Handling and storage

7.1. Precautions for safe handling

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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
Store at below 20 °C. Keep away from unguarded flame and heat sources. Avoid direct exposure to sunlight.
Keep away from unguarded flame, sparks, and heat sources. Avoid direct exposure to sunlight.
Keep away from food, drink and feed.
Incompatible materials:
None in particular.
Instructions as regards storage premises:
Cool and adequately ventilated.

7.3. Specific end use(s)

None in particular

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Butane - contenant <=0,1% de butadiène (203-450-8) - CAS: 106-97-8
ACGIH - STEL: 1000 ppm - Notes: (EX) - CNS impair
Isobutane - contenant <= 0,1%de butadiène (203-450-8) - CAS: 75-28-5
ACGIH - STEL: 1000 ppm - Notes: (EX) - CNS impair
propan-2-ol; isopropyl alcohol; isopropanol - CAS: 67-63-0
ACGIH - TWA(8h): 200 ppm - STEL: 400 ppm - Notes: A4, BEI - Eye and URT irr, CNS impair
propane - CAS: 74-98-6
ACGIH - Notes: (D, EX) - Asphyxia
acetone; propan-2-one; propanone - CAS: 67-64-1
EU - TWA(8h): 1210 mg/m³, 500 ppm
ACGIH - TWA(8h): 250 ppm - STEL: 500 ppm - Notes: A4, BEI - URT and eye irr, CNS impair
DNEL Exposure Limit Values
Not available
PNEC Exposure Limit Values
Not available

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

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:	Liquide fluide en aérosol	--	--
Odour:	Not available	--	--
Odour threshold:	Not available	--	--
pH:	Not available	--	--
Melting point / freezing point:	Not available	--	--
Initial boiling point and boiling range:	Not available	--	--
Flash point:	Not available	--	--
Evaporation rate:	Not available	--	--
Solid/gas flammability:	Not available	--	--
Upper/lower flammability or explosive limits:	Not available	--	--
Vapour pressure:	Not available	--	--
Vapour density:	Not available	--	--
Relative density:	<1	--	--
Solubility in water:	insoluble	--	--
Solubility in oil:	Not available	--	--
Partition coefficient (n-octanol/water):	Not available	--	--
Auto-ignition temperature:	Not available	--	--
Decomposition temperature:	Not available	--	--
Viscosity:	Not available	--	--
Explosive properties:	Not available	--	--
Oxidizing properties:	Not available	--	--

9.2. Other information

Properties	Value	Method:	Notes:
Miscibility:	Not available	--	--
Fat Solubility:	Not available	--	--
Conductivity:	Not available	--	--

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Substance Groups relevant properties	Not available	--	--
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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

Avoid contact with combustible materials. The product could catch fire.

10.6. Hazardous decomposition products

None.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological information of the product:

Not available

Toxicological information of the main substances found in the product:

propan-2-ol; isopropyl alcohol; isopropanol - CAS: 67-63-0

a) acute toxicity:

Test: LD50 - Route: oral - Species: Rat : = 4700-5500 mg/Kg

Test: LC50 - Route: Inhalation - Species: Rat : = 46-73 mg/L - Duration: 4h

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 (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.

propan-2-ol; isopropyl alcohol; isopropanol - CAS: 67-63-0

a) Aquatic acute toxicity:

Endpoint: LC50 Fish \geq 9640-10400 mg/L - Duration h: 96

Endpoint: EC50 Daphnia = 2285-13299 mg/L - Duration h: 48

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

Endpoint: EC50 Daphnia magna = 0.110 mg/L - Duration h: 48

12.2. Persistence and degradability

Not available

12.3. Bioaccumulative potential

Not available

12.4. Mobility in soil

Not available

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

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14.1. UN number

ADR-UN number: 1950

14.2. UN proper shipping name

ADR-Shipping Name: Aérosols inflammables

14.3. Transport hazard class(es)

ADR-Class: 2.1

14.4. Packing group

14.5. Environmental hazards

14.6. Special precautions for user

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not available

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)

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 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
Product belongs to category: P3a, E1

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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:

- H220 Extremely flammable gas.
- H304 May be fatal if swallowed and enters airways.
- EUH066 Repeated exposure may cause skin dryness or cracking.
- H225 Highly flammable liquid and vapour.
- H319 Causes serious eye irritation.
- H336 May cause drowsiness or dizziness.
- 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.

Hazard class and hazard category	Code	Description
Flam. Gas 1	2.2/1	Flammable gas, Category 1
Aerosols 1	2.3/1	Aerosol, Category 1
Flam. Liq. 2	2.6/2	Flammable liquid, Category 2
Acute Tox. 4	3.1/4/Inhal	Acute toxicity (inhalation), Category 4
Acute Tox. 4	3.1/4/Oral	Acute toxicity (oral), Category 4
Asp. Tox. 1	3.10/1	Aspiration hazard, Category 1
Eye Irrit. 2	3.3/2	Eye irritation, Category 2
Skin Sens. 1,1A,1B	3.4.2/1-1A-1B	Skin Sensitisation, Category 1,1A,1B
STOT SE 3	3.8/3	Specific target organ toxicity - single exposure, Category 3
Aquatic Acute 1	4.1/A1	Acute aquatic hazard, category 1
Aquatic Chronic 1	4.1/C1	Chronic (long term) aquatic hazard, category 1

Paragraphs modified from the previous revision:

- SECTION 1: Identification of the substance/mixture and of the company/undertaking
- SECTION 2: Hazards identification
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- SECTION 8: Exposure controls/personal protection
- SECTION 9: Physical and chemical properties
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- SECTION 11: Toxicological information
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- SECTION 16: Other information

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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
Aerosols 1, H222+H229	On basis of test data
Eye Irrit. 2, H319	Calculation method
Aquatic Acute 1, H400	Calculation method
Aquatic Chronic 1, H410	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.
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.
N.A.:	Not available
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
UN:	United Nations
WGK:	German Water Hazard Class.