Safety Data Sheet
Flash Dose

Safety Data Sheet dated 23/05/2016, version 2

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

1.1. Product identifier

Trade name: **Flash Dose**

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

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.

EC regulation criteria 1272/2008 (CLP)


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:

Warning

Hazard statements:

H319 Causes serious eye irritation.
H317 May cause an allergic skin reaction.
H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements:

P273 Avoid release to the environment.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313 If eye irritation persists: Get medical advice/attention.
P501 Dispose of contents/container in accordance with applicable regulations.

Special Provisions:

None

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:

>= 15% - < 20% 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

>= 1% - < 3% Pyrethrins
CAS: 8003-34-7, EC: 232-319-8
Xn,N; R20/21/22-50-53

 3.1/4/Dermal Acute Tox. 4 H312

 3.1/4/Inhal Acute Tox. 4 H332

 3.1/4/Oral Acute Tox. 4 H302

 4.1/A1 Aquatic Acute 1 H400

 4.1/C1 Aquatic Chronic 1 H410

>= 1% - < 3% 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

>= 1% - < 3% Distillates (petroleum),
Index number: 649-422-00-2, CAS: 64742-47-8, EC: 265-149-8
Xn; R65
 3.10/1 Asp. Tox. 1 H304

>= 0.5% - < 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

>= 0.1% - < 0.25% Butyl Hydroxytoluene
CAS: 128-37-0
N; R50/53
 4.1/C1 Aquatic Chronic 1 H410

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

In case of skin or eye contact, immediately and thoroughly wash with water.
Seek medical attention if ill effect or irritation develops

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 ingestion, rinse mouth with water.
Immediately consult a physician and show the label.

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

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Water.

Carbon dioxide (CO_2).

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 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

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.

Contamined 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.
Store in the original container
Keap out of reach of children
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

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Pyrethrins - CAS: 8003-34-7
EU - LTE(8h): 1 mg/m3 - Notes: Bold-type: Indicative Occupational Exposure Limit Values [2,3] and Limit Values for Occupational Exposure [4] (for references see bibliography)
ACGIH - LTE(8h): 5 mg/m3 - Notes: A4 - Liver dam, LRT irr
2-methylpropan-1-ol; iso-butanol - CAS: 78-83-1
ACGIH, 50 ppm - Notes: Skin and eye irr
Butyl Hydroxytoluene - CAS: 128-37-0
ACGIH - LTE(8h): 2 mg/m3 - Notes: A4, (IFV) - URT irr
DNEL Exposure Limit Values
N.A.
PNEC Exposure Limit Values
N.A.

8.2. Exposure controls

Eye protection:
Avoid contact with eyes
Eye glasses with side protection.
Protection for skin:
No special precaution must be adopted for normal use.
Protection for hands:
Wear gloves
Wash hands after handling.
Respiratory protection:
Not needed for normal use.
Thermal Hazards:
None
Environmental exposure controls:
None

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance and colour:	Yellow Liquid
Odour:	Caracteristic
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:	80 ° C
Evaporation rate:	N.A.
Vapour pressure:	N.A.
Relative density:	0,945
Solubility in water:	dispersible in water
Solubility in oil:	N.A.
Partition coefficient (n-octanol/water):	N.A.
Auto-ignition temperature:	N.A.
Decomposition temperature:	N.A.
Viscosity:	>7 mm2/sec
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.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological information of the mixture:

Flash Dose

a) acute toxicity:

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

Test: LD50 - Route: dermal - Species: Rat : > 4000 mg/Kg

b) skin corrosion/irritation:

Test: Skin Irritant - Species: Rabbit : Non irritating

c) serious eye damage/irritation:

Test: Eye Irritant - Species: Rabbit : Non irritating

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

Pyrethrins - CAS: 8003-34-7
a) acute toxicity:
Test: LD50 - Route: oral - Species: Rat : = 700 mg/Kg
Test: LC50 - Route: Inhalation - Species: Rat : = 3.4 mg/L - Duration: 4h
Test: LD50 - Route: dermal - Species: Rat : > 2000 mg/Kg
b) skin corrosion/irritation:
Test: Skin Irritant - Route: dermal - Species: Rabbit : Non irritating
d) respiratory or skin sensitisation:
Test: Skin Sensitization Non skin sensitizer
e) germ cell mutagenicity:
Test: Mutagenesis - Species: Salmonella Typhimurium : Negative

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.

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

Pyrethrins - CAS: 8003-34-7
a) Aquatic acute toxicity:
Endpoint: LC50 Rainbow Trout = 0.0052 mg/L - Duration h: 96

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

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.

SECTION 14: Transport information

14.1. UN number

Not classified as dangerous in the meaning of transport regulations.

ADR-UN number: 3082

14.2. UN proper shipping name

ADR-Shipping Name: Environmentally hazardous substance, liquide, nos (pyrethrins), 9,III (E)

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

ADR-Tunnel Restriction Code: E

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)

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) 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

SECTION 16: Other information

Full text of phrases referred to in Section 3:
R10 Flammable.
R20/21/22 Harmful by inhalation,in contact with skin and if swallowed.
R37/38 Irritating to respiratory system and skin.
R38 Irritating to skin.
R41 Risk of serious damage to eyes.
R50 Very toxic to aquatic organisms.
R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R53 May cause long-term adverse effects in the aquatic environment.
R65 Harmful: may cause lung damage if swallowed.
R67 Vapours may cause drowsiness and dizziness.

H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.
H312 Harmful in contact with skin.
H332 Harmful if inhaled.
H302 Harmful if swallowed.
H315 Causes skin irritation.
H318 Causes serious eye damage.
H304 May be fatal if swallowed and enters airways.
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
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.