





SECTION 1: Identification of the substance/mixture and of the company/undertaking 1.1. Product identifier

Trade name:

KELION

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

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: N Dangerous for the environment

R Phrases:

R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. R64 May cause harm to breastfed babies.

EC regulation criteria 1272/2008 (CLP) Lact., May cause harm to breast-fed children.



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: H362 May cause harm to breast-fed children. H410 Very toxic to aquatic life with long lasting effects. Precautionary statements: P260 Do not breathe dust or mist. P263 Avoid contact while nursing. P270 Do no eat, drink or smoke when using this product. P273 Avoid release to the environment. P308+P313 IF exposed or concerned: Get medical advice/attention. 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:

300g/L Etofenprox CAS: 80844-07-1, EC: 407-980-2 N; R50/53-64 3.7/Lact. Lact. H362 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:

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

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media: Water. Carbon dioxide (CO2). 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

Avoid contact with skin and eyes, inhaltion 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. 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

Store in the original container 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

No occupational exposure limit available 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:

No special precaution must be adopted for normal use.

Protection for hands:

Wearing gloves is recommended.

Respiratory protection:

In case of volumes treatments, wear appropriate repiratory apparatus (filtering device) 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:	Liquid Slightly Yellow
Odour:	Caracteristic
Odour threshold:	N.A.
pH:	6,40 (diluted at 1% at 19,9°C)
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:	137,0 +/- 0,5 ° C
Evaporation rate:	N.A.
Vapour pressure:	N.A.
Relative density:	1,031 +/- 0,001
Solubility in water:	N.A.
Solubility in oil:	N.A.
Partition coefficient (n-octanol/water):	N.A.
Auto-ignition temperature:	430 +/- 8°C



Decomposition temperature:	N.A.	
Viscosity:	37,83 m²/s et 20°C	
Explosive properties:	No explosive properties	
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:

KELION

a) acute toxicity:

Test: LD50 - Route: dermal - Species: Rat : > 2000 mg/kg b.w (OCDE N°402) Test: LD50 - Route: oral - Species: Rat : > 2000 mg/kg b.w (OCDE N°423) Test: LC50 - Route: Inhalation - Species: Rat : > 5.22 mg/L - Duration: 4h (OCDE N°436)

- b) skin corrosion/irritation: Test: Skin Irritant - Route: dermal - Species: Rabbit : Non irritating (OCDE N°404)
- c) serious eye damage/irritation:

Test: Eye Irritant - Route: ocular - Species: Rabbit : Non irritating (OCDE N°405) - Notes: slight to moderate irritation - reversible

d) respiratory or skin sensitisation:

Toxicological information of the main substances found in the mixture:

- Etofenprox CAS: 80844-07-1
 - a) acute toxicity:
 - Test: LD50 Route: oral Species: Rat : > 2000 mg/Kg
 - Test: LD50 Route: dermal Species: Rat : > 2000 mg/Kg

Test: Skin Sensitization - Route: dermal - Species: Guinea Pig : Non skin sensitizer (OCDE N°406)



Test: LC50 - Route: Inhalation - Species: Rat : > 5.88 mg/L - Duration: 4h May cause harm to breastfed babies

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.

Etofenprox - CAS: 80844-07-1

- a) Aquatic acute toxicity: Endpoint: LC50 Rainbow Trout = 0.0027 mg/L - Duration h: 96 Endpoint: LC50 Bluegill = 0.013 mg/L - Duration h: 96 Endpoint: EC50 Daphnia magna = 0.0012 mg/L - Duration h: 48
- b) Aquatic chronic toxicity:

Endpoint: NOEC Rainbow Trout = 0.0032 mg/L - Duration: 21 jours Endpoint: NOEC Zebra Fish = 0.025 mg/L - Duration: 40 jours Endpoint: NOEC Daphnia magna = 0.000054 mg/L - Duration: 21 jours

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.



14.1. UN number ADR-UN number: IMDG-Un number:	3082 3082
14.2. UN proper shipping name ADR-Shipping Name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, NOS (Etofenprox), 9,III, (E)
14.3. Transport hazard class(es) ADR-Class:	9
14.4. Packing group ADR-Packing Group:	III
14.5. Environmental hazards Marine pollutant:	Marine pollutant
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)

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) 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 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



SECTION 16: Other information

Full text of phrases referred to in Section 3:

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

R64 May cause harm to breastfed babies.

H362 May cause harm to breast-fed children.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

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: EC50:	Derived No Effect Level.
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.