
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, 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.
See also section 8 for recommended protective equipment.
Advice on general occupational hygiene:
Contaminated clothing should be changed before entering eating areas.
Do not eat or drink while working.

7.2. Conditions for safe storage, including any incompatibilities

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

Chrysanthemum cinerariaefolium, extract - CAS: 89997-63-7
EU - TWA(8h): 1 mg/m³ - Notes: DIRECTIVE 2006/15/CE DE LA COMMISSION
(Pyrethre CAS : 8003-34-7)
DNEL Exposure Limit Values
Not available
PNEC Exposure Limit Values
Cypermethrin cis/trans +/- 40/60 - CAS: 52315-07-8
Target: Fresh Water - Value: 0.004 µg/L
Target: 3 - Value: 1.63 mg/l
Target: Soil - Value: 0.08 mg/kg
Target: Freshwater sediments - Value: 0.05 mg/kg - Notes:: equilibrium partitioning method (koc of 575000)

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:
Not needed for normal use.
Wear gloves EN374 in case of projection.
Respiratory protection:
Not needed for normal use.

Thermal Hazards:
None
Environmental exposure controls:
None
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:	Whitish liquide	--	--
Odour:	Not available	--	--
Odour threshold:	Not available	--	--
pH:	5.4	--	--
Melting point / freezing point:	Not available	--	--
Initial boiling point and boiling range:	Not available	--	--
Flash point:	62°C<PE<93 ° C	--	--
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:	1.001	--	--
Solubility in water:	Not available	--	--
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	--	--
Substance Groups relevant properties	Not available	--	--

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 product:

Not available

Toxicological information of the main substances found in the product:

Cypermethrin cis/trans +/- 40/60 - CAS: 52315-07-8

a) acute toxicity:

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

Cypermethrin CAR - February 2017 - Notes: (groundnut oil)

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

Cypermethrin CAR February 2017

Test: LC50 - Route: Inhalation - Species: Rat : = 3281 g/m3 - Source:

Cypermethrin CAR - February 2017 - Notes: (males)

Test: NOAEL - Route: oral - Species: Dog = 12.5 mg/kg b.w/d - Source:

Cypermethrin CAR -February 2017

b) skin corrosion/irritation:

Test: Skin Irritant - Route: dermal Slightly irritant - Source: Cypermethrin CAR - February 2017 - Notes: Ne requiert pas de classification

c) serious eye damage/irritation:

Test: Eye Irritant - Route: ocular Slightly irritant - Source: Cypermethrin CAR - February 2017 - Notes: Ne requiert pas de classification

d) respiratory or skin sensitisation:

Test: Skin Sensitization - Route: dermal Non skin sensitizer - Source:

Cypermethrin CAR - February 2017 - Notes: LLNA in mouse

f) carcinogenicity:

Test: NOAEL - Route: oral - Species: Rat : = 5 mg/kg b.w/d - Source:

Cypermethrin CAR -February 2017

g) reproductive toxicity:

Test: NOAEL - Route: oral - Species: Rat : = 10 mg/kg b.w/d - Source:

Cypermethrin CAR -February 2017 - Notes: NOAEL offspring

Chrysanthemum cinerariaefolium, extract - CAS: 89997-63-7

a) acute toxicity:

Test: LD50 - Route: oral - Species: Rat : = 1030 mg/kg b.w/d - Notes: Nominal 57% Chrysanthemum cinerariaefolium, ext

Test: LD50 - Route: dermal - Species: Rabbit : > 2000 mg/kg b.w - Notes: nominal 57% Chrysanthemum cinerariaefolium, ext.

Test: LC50 - Route: Inhalation - Species: Rat : > 2.3 mg/L - Duration: 4h - Notes: nominal 57% Chrysanthemum cinerariaefolium, ext.

d) respiratory or skin sensitisation:

Test: Skin Sensitization - Route: dermal Non skin sensitizer - Notes: nominal 57% Chrysanthemum cinerariaefolium, ext.

f) carcinogenicity:

Test: NOAEL = 4.4 mg/kg b.w/d - Notes: nominal 57% Chrysanthemum cinerariaefolium, ext.

g) reproductive toxicity:

Test: NOAEL = 360 mg/kg b.w/d - Notes: nominal 57% Chrysanthemum cinerariaefolium, ext.

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.

Cypermethrin cis/trans +/- 40/60 - CAS: 52315-07-8

a) Aquatic acute toxicity:

Endpoint: LC50 *Oncorhynchus mykiss* = 2.83 µg/L - Duration h: 96

Endpoint: NOEC Fish = 0.463 µg/L - Notes: 28 days (early life stage)

Endpoint: EC50 *Daphnia magna* = 4.71 µg/L - Duration h: 48

Endpoint: ErC50 *Selenastrum capricornutum* > 33 µg/L - Duration h: 96

b) Aquatic chronic toxicity:

Endpoint: EC50 *Daphnia magna* = 0.35 µg/L - Notes: 21 days

Endpoint: NOEC *Daphnia magna* = 0.04 µg/L - Notes: 21 days

Endpoint: NOEC *Selenastrum capricornutum* > 33 µg/L - Duration h: 96

c) Bacteria toxicity:

Endpoint: EC50 microorganisms = 163 mg/L - Duration h: 3

Chrysanthemum cinerariaefolium, extract - CAS: 89997-63-7

a) Aquatic acute toxicity:

Endpoint: LC50 Rainbow Trout = 5.2 µg/L - Duration h: 96

Endpoint: EC50 *Daphnia magna* = 12 µg/L - Duration h: 48 - Notes: LOEC value of 2.0 µg.l-1 were determined (21 d study)

b) Aquatic chronic toxicity:

Endpoint: NOEC Fathead minnow = 1.9 µg/L - Notes: LOEC value of 3.0 µg.l-1 (35d study)

Endpoint: NOEC *Daphnia magna* = 0.86 µg/L - Notes: LOEC value of 2.0 µg.l-1 were determined

c) Bacteria toxicity:

Endpoint: NOEC Activated sludge = 0.23 µg/L - Duration h: 3

12.2. Persistence and degradability

Chrysanthemum cinerariaefolium, extract from open and mature flowers of Tanacetum cinerariifolium obtained with supercritical CO₂ (Redefined from Pyrethrins and Pyrethroids and Chrysanthemum cinerariaefolium, ext.) - CAS: 89997-63-7

Biodegradability: Readily biodegradable - Notes: in presence of UV light

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. In so doing, comply with the local and national regulations currently in force.

SECTION 14: Transport information**14.1. UN number**

ADR-UN number: 3082

14.2. UN proper shipping name

ADR-Shipping Name: UN 3082 Environmentally hazardous substance liquid, nos (cypermethrin, chrysanthemum cinerariaefolium extract), 9, III (E)

14.3. Transport hazard class(es)

ADR-Class: 9

14.4. Packing group

ADR-Packing Group: III

14.5. Environmental hazards

Not available

14.6. Special precautions for user

Not available

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)
 Regulation (EU) n. 2017/776 (ATP 10 CLP)
 Regulation (EU) n. 2018/699 (ATP 11 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
 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: E1

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:

H332 Harmful if inhaled.
 H302 Harmful if swallowed.
 H335 May cause respiratory irritation.
 H373 May cause damage to organs through prolonged or repeated exposure.
 H400 Very toxic to aquatic life.
 H410 Very toxic to aquatic life with long lasting effects.
 H330 Fatal if inhaled.
 H301 Toxic if swallowed.
 H314 Causes severe skin burns and eye damage.
 H318 Causes serious eye damage.
 H317 May cause an allergic skin reaction.
 H411 Toxic to aquatic life with long lasting effects.

Hazard class and hazard category	Code	Description
Acute Tox. 2	3.1/2/Inhal	Acute toxicity (inhalation), Category 2

Acute Tox. 3	3.1/3/Oral	Acute toxicity (oral), Category 3
Acute Tox. 4	3.1/4/Inhal	Acute toxicity (inhalation), Category 4
Acute Tox. 4	3.1/4/Oral	Acute toxicity (oral), Category 4
Skin Corr. 1B	3.2/1B	Skin corrosion, Category 1B
Eye Dam. 1	3.3/1	Serious eye damage, Category 1
Skin Sens. 1A	3.4.2/1A	Skin Sensitisation, Category 1A
STOT SE 3	3.8/3	Specific target organ toxicity - single exposure, Category 3
STOT RE 2	3.9/2	Specific target organ toxicity - repeated exposure, Category 2
Aquatic Acute 1	4.1/A1	Acute aquatic hazard, category 1
Aquatic Chronic 1	4.1/C1	Chronic (long term) aquatic hazard, category 1
Aquatic Chronic 2	4.1/C2	Chronic (long term) aquatic hazard, category 2

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
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.
ATE:	Acute Toxicity Estimate
ATEmix:	Acute toxicity Estimate (Mixtures)
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.

Safety Data Sheet

Critterkill Bed Bug Killer+

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.