



Material Safety Data Sheet

1. PRODUCT AND COMPANY

1.1 Product identifier

Product: AEDEX EC

1.2 Identified uses

Use: Biocide Insecticide product (PT18)
Emulsifiable concentrate for professional use only

1.3 Supplier's details

Company: AEDES
75, rue d'Orgemont
95210 SAINT-GRATIEN
Tél : +33 (0)1 39 89 85 86
Fax : +33 (0)1 39 89 85 44
aedes@club-internet.fr

Emergency call

Anti-poison center from Paris: + 00 33 (0)1 40 05 48 48
ORFILA (INRS): + 00 33 (0)1 45 42 59 59

2. HAZARDS IDENTIFICATION

2.1 Classification of the mixture

Classification according to Regulation (EC) No 1272/2008

H315 Causes skin irritation
H317 May cause an allergic skin reaction
H318 Causes serious eye damage
H332 Harmful if inhaled
H335 May cause respiratory irritation
H400 Very toxic to aquatic life
H410 Very toxic to aquatic life with long lasting effects
EUH066: Repeated exposure may cause skin dryness or cracking

2.2 Label elements

Hazard-determining components of labeling

- *Permethrin*
- *D-Tetramethrin*
- *Distillates (petroleum), hydrotreated light*
- *Calcium dodecylbenzene sulfonate*
- *Ethoxylated alcohols mix*

Classification according to Regulation (EC) No 1272/2008

Identification symbol and letter



GHS05



GHS09

Signal word : **DANGER**

H315 Causes skin irritation
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H335 May cause respiratory irritation
H410 Very toxic to aquatic life with long lasting effects
EUH066: Repeated exposure may cause skin dryness or cracking

Precautionary statement:

P261 Avoid breathing mist, vapors or spray
P273 Avoid release to the environment
P280 Wear protective gloves, protective clothing and eye protection
P301+P310+P331 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Do NOT induce vomiting.
P302+P352 IF ON SKIN: Wash with soap and water
P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
P305+P351+P338+P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. Immediately call a POISON CENTER or doctor/physician
P333+P313 If skin irritation or a rash occurs: Get medical advice/attention
P391 Collect spillage
P501 Dispose of contents/container in accordance with local regulation

2.3 Other hazards

Contains permethrin : do not use in cats environment.

Results of PBT and vPvB assessment: No data available

3. COMPOSITION / INFORMATION ON COMPONENTS

Chemical characterization: mixture

Description: Emulsifiable concentrate based on the active substances Permethrin (240g/l) and D-tetramethrin (40g/l) and PBO (200g/l)

Hazardous ingredients

Name	N°CAS / EC	Concentration	Classification 67/548/EEC	CLP Classification (R1272/2008)
Active ingredient(s)				
<i>Permethrin</i>	52645-53-1 / 258-067-9	24% (w/w) 240g/l	N, Xn, R20/22, R43, R50/53	GHS07, GHS09, H302, H317, H332, H400, H410
<i>D-Tetramethrin</i>	1166-46-7 / 214-619-0	4% (m/m) 40 g/l	N, R50/53	GHS09 H400 H410
<i>Piperonyl butoxide</i>	51-03-6 / 200-076-7	20% (m/m) 200 g/l	N, R50/53	GHS09 H400 H410
Other components				

<i>Ethoxylated polarylphenol</i>	99734-09-5	< 8% (m/m)	R52/53	H412
<i>Ethoxylated alcohols mix</i>	68439-46-3	< 12% (m/m)	Xi, R41	GHS07, H302, H315, H319
<i>Calcium dodecylbenzene sulfonate</i>	26264-06-2	< 9% (m/m)	Xi, R38, R41	Skin Irrit 2 H315, Eye Dmg 1 H318
<i>Distillates (petroleum), hydrotreated light</i>	64742-47-8 / 265-149-8	9% (m/m)	Xn, R65, R66	GHS08, H304, UEH066

4. FIRST AID MEASURES

4.1 Description of first aid measures

After skin contact

Remove all soiled clothing and shoes.
Wash in water and soap; rinse abundantly with water
Consult a doctor

After eye contact

Rinse cautiously with water for several minutes.
Remove contact lenses if present and easy to do – continue rinsing

After inhalation

Have the person breathe in fresh air.
Loosen the person's clothing.
Keep warm and allow to rest.
Consult a doctor

After swallowing

Rinse the mouth with water
Do not induce vomiting
Give some water to drink
Consult a doctor

4.2 Most important symptoms and effects, both acute and delayed

Systemic poisoning:

May require artificial respiration and heart assistance.

4.3 Indication of any immediate medical attention and special treatment needed

Instructions for physician only:

Specific observation parameters:

Electrocardiogram
After inhalation, look for lung oedema
After swallowing, gastric lavage with activated carbon
Tracheal intubation, artificial respiration if needed
Product elimination by dialysis and blood transfusion
Anticonvulsant: Diazepam i.v

After skin contact:

Apply a vitamin E based cream or a milk lotion

After eye contact:

Use anesthetic drops in the eyes (1% methocaine hydrochloride). Give pain-killers if needed. Can cause severe pains

5. FIREFIGHTING MEASURES

5.1 Extinguishing media

CO2, dry chemical powder, foam or water spray

5.2 Special hazards arising from the substance or mixture

In case of fire, toxic gases and irritating vapors are emitted

5.3 Advice for firefighters

Wear self-contained respiratory equipment and full protective suit

Other recommendations

For safety reasons unsuitable extinguishing agents: Water with full jet

In the case of fire wear self-contained respiratory equipment and full protective suit. Contain runoff to prevent entry into water or drainage systems. Cool down exposed product container if possible. Remove exposed packagings to a safe distance, if doing so is not dangerous. Prevent extinction water being emitted into the environment.

6. ACCIDENTAL RELEASE MEASURE

6.1 Personal precautions, protective equipment and emergency procedure:

Keep unprotected persons away. Avoid contact with skin and eyes.

Please notice instructions for person-related safety precautions and wear protective equipment (See 8.)

6.2 Environmental precautions

Do not allow to enter sewers/ surface or ground water. Absorb with liquid-binding material (sand, diatomite, acid or universal binders, sawdust).

6.3 Methods and material for containment and cleaning up

Place into lockable, labeled salvage container for disposal according to the regulations. Use a detergent/water mixture as a cleaning agent. Collect cleaning agent in a suitable container after use.

Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See section 13 for disposal information.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Comply with instructions for use.

When using the product do not eat, drink or smoke.

Wash hands before break and at the end of work.

Technical measures

Install an extraction fan at points where dust forms.

Provide an eye wash and sanitary installations near workplaces.

Specific precautions

Wash hands after handling

7.2 Conditions for safe storage, including any incompatibilities

Technical measures

Store in tightly closed containers in a cool, well ventilated and dry place.

Do not store food, beverages and animal feeding stuffs in the storage area.

Keep container tightly sealed.

Protect from frost (reversible crystal formation may occur)

Advised packaging material: PEHD, stained steel

Furnished packaging: stained steel container

Temperature

Ambient

Other recommendations

Only store in the original packaging

Do not re-use the empty packaging

7.3 Specific end use(s)

Use only according to instructions

8. EXPOSURE CONTROL / PERSONNAL PROTECTION

8.1 Control parameters

Ingredients with limit values that require monitoring at the workplace:

Solvent: 300ppm (short term exposure limit)

8.2 Exposure control

General protective and hygienic measures:

Do not eat, drink or smoke at workplace and keep it tidy.

The usual precautionary measures are to be adhered to when handling chemicals

Remove contaminated clothing and wash carefully before reuse

Do not inhale vapors, sprays or mists.

Ensure good ventilation

Respiratory protection:



In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device (type A2P3).

Protection of hands:

Protective gloves:



Chemical resistant gloves mandatory (norm EN374-1)

Dispose of when contaminated inside, when perforated or when contamination outside cannot be removed.

Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material cannot be calculated in advance and has therefore to be checked prior to the application.

Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye protection:



Tightly sealed goggles mandatory (norm EN 166)

Body protection: Protective work clothing

Limitation and supervision of exposure into the environment

Do not allow to enter sewers/ surface or ground water. Inform respective authorities in case of seepage into water course or sewage system

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance:	liquid
Color:	translucent yellowish
Odor:	caractéristic
pH:	3,5-4,5
Flash point:	64°C
Flammability:	combustible
Relative density:	0.87 at 20°C
Solubility:	Emulsifiable in water and in usual organic solvents.
Log POW	Permethrin 25/75 – 6.1

9.2 Other informations

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10. STABILITY AND REACTIVITY

10.1 Reactivity

No data available

10.2 Chemical stability

No decomposition if used according to specifications

10.3 Possibility of hazardous reaction

No hazardous reactions known if used according to specifications

10.4 Conditions to avoid

Keep product away from heat and source of ignition

10.5 Incompatible materials

No data available

10.6 Hazardous decomposition products

None under normal conditions of storage and use

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

**Acute toxicity (evaluation done on a similar composition):
LD/LC50 values relevant for classification:**

Oral LD50 rat 8300mg/kg (male), 4930mg/kg (female)

Dermal LD50 rat >8300mg/kg

Inhalation LC50/4h no data

Primary irritant effect:

On the skin: cause skin irritation

On the eye: cause severe eye irritation, risk of serious eye damage

Sensitization: sensitizing by skin contact

Chronic toxicity for permethrin: Noael = 10mg/kg/day

Additional toxicological information:

Due to solvent in the mixture:

- the product can cause in case of repeated exposure may cause skin dryness or cracking
- may cause lung damage if swallowed
- can provoke temporary sensations of burn/pinprick on the face/mucous membrane without skin injury (24 hours maximum)

12. ECOLOGICAL INFORMATION

12.1 Toxicity

Ecotoxicological effects:

Active ingredient toxicity technical permethrin 25/75:

LC50 (rainbow trout): 0,0001 < CL50 <= 0,001 mg/l

LD50 (birds) : > 9800 mg/kg

Active ingredient toxicity technical D-tetramethrin:

LC50/96h (rainbow trout): 10 µg/L

EC50/48h (Daphnia magna): 0.11 mg/L

12.2 persistence and degradability

DT50 soil : 30 days (permethrin)

PBO : not readily biodegradable. However, degrades naturally over time.

12.3 Bioaccumulative potential

Log Pow = 6.1 BCF : 535 (permethrin)

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

Permethrin, D-Tetramethrin & PBO do not fulfill the PBT/vPvB criterias at the time being.

12.6 Other adverse effects

Hazardous to bees and other pollinators insects.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Do not dispose waste or remains together with domestic waste, do not empty into sink or toilet, hand over to hazardous waste disposers. Do not allow product/contaminated cleaning water to reach ground water, water course or sewage system. The unused product must be eliminated as a hazardous waste under the user responsibility. The unsoiled packaging can be eliminated as a non hazardous waste under the user responsibility.

Disposal of soiled packaging

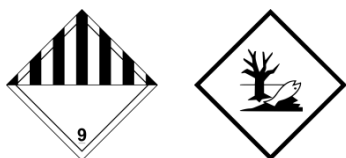
Do not reuse empty contaminated packaging for other purposes; dispose according to official regulations.

14. Transport information

14.1 UN number

3082

14.2 Un proper shipping name



ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., 9, III (Mixture of Permethrin, Piperonyl butoxide, D-Tetramethrin)

14.3 Transport hazard class

9

14.4 packing group

III

14.5 Environmental hazards

9 (M6) – danger code 90

14.6 Special precaution for user

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14.7 transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

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Other informations:

ADR additional informations

Item number : M6
Label : 9
Hazard Code : 90

O.A.C.I. (by air)

Transport assimilation : Environmentally hazardous substance, liquid, n.o.s.
(Mixture of Permethrin, Piperonyl butoxide, D-Tetramethrin)
UN number : 3082
Class : 9
Group : III
Label : 9
Passengers : 964
Cargo : 964-Y964 (limited)

I.M.D.G. (by sea)

Transport assimilation : Environmentally hazardous substance, liquid, n.o.s.
(Mixture of Permethrin, Piperonyl butoxide, D-Tetramethrin)
UN number : 3082
Class : 9
Group : III
Label : 9
Mark : Marine pollutant

15. Regulatory information

15.1 Safety, health and environmental regulations/legislation for the mixture

This formulation is beyond the scope of Regulation (EC) No 2037/2000 of European Parliament and the Council of 29 June 2000 on substances that deplete the ozone layer.

This formulation is beyond the scope of Regulation (EC) No 850/2004 of the European Parliament and the Council of 29 April 2004 on persistent organic pollutants and amending Directive 79/117/EEC.

This formulation is under the scope of Regulation (EC) No 649/2012 of the European Parliament and the Council of 17 June 2008 concerning the export and import of dangerous chemicals – permethrin.

This formulation is not subject to special provisions for the protection of human health or the environment at Community level.

This formulation is in the scope of the ICPE French regulation (installation classée pour la protection de l'environnement) and is classified : 1172 – stockage et emploi de substances ou préparations dangereuses pour l'environnement, très toxiques. (stock and use of substance or mixtures hazardous for environment, very toxic)

15.2 Chemical safety assessment

No chemical safety assessment available

16. OTHER INFORMATIONS

R-phrases and H-phrases paragraph 3

R20/22 Harmful by inhalation and if swallowed

R38 Irritating to skin

R41 Risk of serious damage 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

R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment

R66 Repeated exposure may cause skin dryness or cracking

H302 Harmful if swallowed

H304 May be fatal if swallowed and enters airways

H315 Causes skin irritation

H317 May cause an allergic skin reaction

H318 Causes serious eye damage

H319 Causes serious eye irritation

H332 Harmful if inhaled

H400 Very toxic to aquatic life

H410 Very toxic to aquatic life with long lasting effects

H412 Harmful to aquatic life with long lasting effects

Abbreviations and acronyms:

CAS: Chemical Abstracts Service (division of the American Chemical Society)

EINECS: European Inventory of Existing Commercial Chemical Substances

GHS: Globally Harmonized System of Classification and Labeling of Chemicals

CLP: REGULATION (EC) No 1272/2008 on classification, labeling and packaging of substances and mixtures

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

Updates:

This document differs from the previous version in the following areas:

- updated classification section 2
- updated composition section 3
- added data section 11

Also refer to technical instructions for use.

The data contained in this material safety data sheet are based on the current level of scientific and technical knowledge in this domain and at the date of the last update and are given bona fide.

These data cannot be used to confirm the product properties and do not constitute a legal or a contractual covenant. These data shall not be used as an order basis.

This sheet completes the technical data but do not replace them.

The user bears full responsibility for knowing and applying the legal texts, the handling procedures and the safety measures linked to the product use.

The entirety of the regulatory and legal prescriptions mentioned can only be used as a support to help the user fulfilling his duty in the use of the aforementioned product.

It is advised to consult the national or international measures that can apply because the measures contained in this sheet should not be considered to be exhaustive.

This document does not exempt the user to make sure that others obligations devolve upon himself in particular regarding to product's possession, use or specification and for which he is fully responsible.