Zeuzera Pro Caps®



SOLUTION DE PIEGEAGE A BASE DE PHEROMONE

Cette solution combine un piège Funnel et un diffuseur à base phéromone sexuelle pour capturer les adultes de la zeuzère du poirier.

Zeuzère du poirier (*Zeuzera pyrina*)

Plantes hôtes : L'espèce étant polyphage, la zeuzère du poirier peut induire des dégâts à la fois sur des arbres fruitiers (poiriers, pommiers, cerisiers, pruniers, …) et sur des arbres ornementaux (chênes, marronniers, érables, …).

Stade ravageur : Chenille

Stade ciblé : **Adulte (papillon mâle)**

Emergence : début juin à début septembre après hivernation au stade de chenille

Nombre de générations : 1 génération par an
1 femelle peut pondre jusqu'à 1000 œufs



Adulte *Z. pyrina*

Reconnaissance du ravageur :

Adulte : 5 à 6 cm d'envergure ; corps blanc moucheté de noir ;
Chenille : 5 cm ; jaune avec des points noirs



Chenille *Z. pyrina*

Reconnaissance des dégâts : Chenille xylophage donc présence de tas de sciure cylindrique et d'écoulements de sève sur les branches et le tronc. Dessèchement des branches

Mode d'emploi

Utilisation : Seringue Zeuzera Pro Caps® + Funnel

Installation : Insérer la cage dans la partie haute du piège. Déposer 1 goutte de formulation par simple pression sur le piston (inutile de découper l'embout) dans la partie basse du piège et emboiter la partie supérieure. Vider le reste du contenu de la seringue dans la cage prévue à cet effet. Les papillons mâles attirés par la phéromone sexuelle femelle pénètrent dans le piège et sont capturés.







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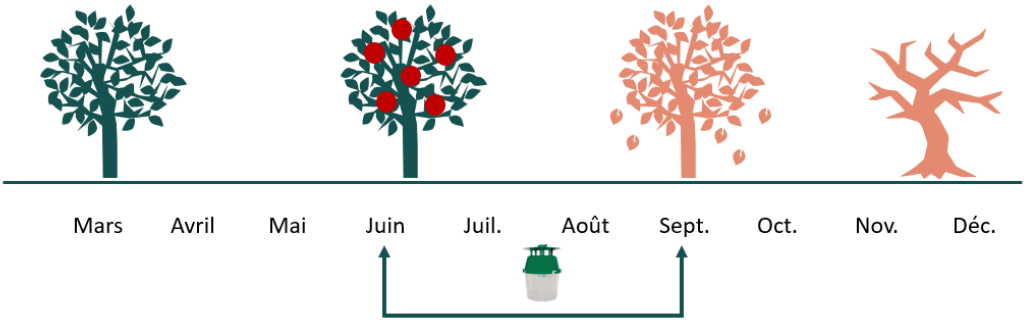
Caractéristiques du Zeuzera Pro Caps®

Type de produit	Diffuseur de phéromone sexuelle
Conditionnement	Seringue en polypropylène
Usage	Détection / Monitoring
Substance active	2E,13Z/3E,13Z octadecadien-1-yl acetate
Volume de formulation	0,4 g
Durée indicative de diffusion*	90 jours
Rayon de diffusion estimé	Papillons attirés sur un rayon de 2 à 5 m

* selon les conditions climatiques, pour une température moyenne de 30 °C et en l'absence de vents forts.

Mise en place de la détection

Période de détection : De juin à septembre (penser à renouveler le diffuseur selon la durée indicative de diffusion et à effectuer des relevés de manière hebdomadaire).



Positionnement du piège : Suspendre le piège dans la canopée de l'arbre

Densité recommandée pour du monitoring : 2 à 4 pièges / ha

Stratégie de détection : le monitoring par phéromones

Les phéromones sont des substances secrétées par l'insecte qui agissent comme un message entre les individus d'une même espèce. Il existe différents types de phéromones : d'alarme, d'agrégation, sexuelles… Le monitoring par phéromones sexuelles est basé sur la mise en place d'un leurre mimant cette substance émise par la femelle à l'intérieur d'un piège. Le leurre attire les mâles qui sont alors capturés. Cela permet d'une part de détecter l'arrivée du ravageur et de suivre son niveau d'infestation. Dans les cas de forte pression, cela donne également la possibilité de déclencher à temps une intervention curative et/ou de mesurer l'efficacité d'un traitement.

Avantages

Cette méthode est efficace, **sélective et inoffensive pour la faune, la flore, les opérateurs et les riverains**. Elle ne génère pas de résidus ni d'intrants ou encore de résistance. Elle est également compatible avec la loi Labbé et les **labels d'agriculture biologique**.

Recommandations / Sécurité

Conserver hors de portée des enfants.
Conserver à l'écart des animaux domestiques.
Conserver à l'écart des aliments et boissons.
Conserver dans son emballage d'origine et respecter les usages, doses, conditions et précautions d'emploi mentionnés. Ne pas congeler.
Ne pas manger, ne pas boire et ne pas fumer pendant l'utilisation. Se laver les mains après manipulation.
Jeter les emballages vidés et rincés dans la poubelle ménagère.

Premiers soins

En cas de contact avec les yeux, rincer à l'eau par mesure de précaution.
En cas de contact avec la peau, laver avec beaucoup d'eau.
En cas d'ingestion, ne pas faire vomir, rincer la bouche et consulter un médecin.
En cas de malaise, consulter un médecin et lui présenter l'étiquette.

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Zeuzera Pro Caps

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Issue date: 3/14/2018 Revision date: 6/6/2024 Supersedes version of: 3/14/2018 Version: 1.1

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

1.1. Product identifier

Product form : Mixture

Product name : Zeuzera Pro Caps

Product group : Trade product

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1. Relevant identified uses

Main use category : Consumer use

Use of the substance/mixture : Passive pheromone diffuser

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

M2I Biocontrol
1 rue Royale
112 Bureaux de la colline
92210 Saint Cloud
T +33 (0) 5.32.09.40.02
justine.dufourneau@m2i-group.fr

1.4. Emergency telephone number

Country	Organisation/Company	Address	Emergency number	Comment
United Kingdom	Guy's & St Thomas' Poisons Unit Medical Toxicology Unit, Guy's & St Thomas' Hospital Trust	Avonley Road SE14 5ER	+44 20 7188 7188	

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Hazardous to the aquatic environment – Chronic Hazard, Category 3 H412

Full text of H- and EUH-statements: see section 16

Adverse physicochemical, human health and environmental effects

Harmful to aquatic life with long lasting effects.

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Signal word (CLP) : -

Hazard statements (CLP) : H412 - Harmful to aquatic life with long lasting effects.

Precautionary statements (CLP) : P273 - Avoid release to the environment.
P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

2.3. Other hazards

Contains no PBT and/or vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
[(2E,13Z)-octadeca-2,13-dienyl] acetate	(CAS-No.) 86252-74-6	0.1 – 1	Skin Irrit. 2, H315 Aquatic Acute 1, H400
2.6-di-tert-butyl-p-crésol	(CAS-No.) 128-37-0	0.1 – 1	Aquatic Chronic 1, H410

Full text of H- and EUH-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact : Wash skin with plenty of water.
First-aid measures after eye contact : Rinse eyes with water as a precaution.
First-aid measures after ingestion : Call a poison center or a doctor if you feel unwell.

4.2. Most important symptoms and effects, both acute and delayed

No additional information available

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Take up liquid spill into absorbent material.
Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling	:	Ensure good ventilation of the work station. Wear personal protective equipment.
Hygiene measures	:	Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions	:	Store in a well-ventilated place. Keep cool.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Exposure controls

Appropriate engineering controls:
Ensure good ventilation of the work station.

Hand protection:
Protective gloves

Eye protection:
Safety glasses

Skin and body protection:
Wear suitable protective clothing

Respiratory protection:
In case of insufficient ventilation, wear suitable respiratory equipment

Personal protective equipment symbol(s):



Environmental exposure controls:
Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Liquid
Colour	:	No data available
Odour	:	No data available
Odour threshold	:	No data available
pH	:	No data available
Relative evaporation rate (butylacetate=1)	:	No data available
Melting point	:	Not applicable
Freezing point	:	No data available

Boiling point	:	No data available
Flash point	:	No data available
Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available
Flammability	:	Non flammable.
Vapour pressure	:	No data available
Relative vapour density at 20°C	:	No data available
Relative density	:	No data available
Solubility	:	No data available
Partition coefficient n-octanol/water (Log Pow)	:	No data available
Viscosity, kinematic	:	No data available
Viscosity, dynamic	:	No data available
Explosive properties	:	No data available
Oxidising properties	:	No data available
Explosive limits	:	No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	:	Not classified
Acute toxicity (dermal)	:	Not classified
Acute toxicity (inhalation)	:	Not classified

2.6-di-tert-butyl-p-crésol (128-37-0)	
LD50 oral rat	> 6000 mg/kg
LD50 dermal rat	2000 mg/kg

Skin corrosion/irritation	:	Not classified
Serious eye damage/irritation	:	Not classified
Respiratory or skin sensitisation	:	Not classified
Germ cell mutagenicity	:	Not classified
Carcinogenicity	:	Not classified
Reproductive toxicity	:	Not classified

STOT-single exposure : Not classified

STOT-repeated exposure : Not classified

2.6-di-tert-butyl-p-crésol (128-37-0)	
NOAEL (oral, rat, 90 days)	25 mg/kg bodyweight/day

Aspiration hazard : Not classified

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Harmful to aquatic life with long lasting effects.
Hazardous to the aquatic environment, short–term (acute) : Not classified
Hazardous to the aquatic environment, long–term (chronic) : Harmful to aquatic life with long lasting effects.

2.6-di-tert-butyl-p-crésol (128-37-0)	
LC50 - Fish [1]	5.3 mg/l Oryzias latipes (Ricefish)
EC50 - Crustacea [1]	0.48 mg/l EC50 48h - Daphnia magna [mg/l]

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

ADR	IMDG	IATA	ADN	RID
14.1. UN number				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.2. UN proper shipping name				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.3. Transport hazard class(es)				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

14.4. Packing group				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.5. Environmental hazards				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
No supplementary information available				

14.6. Special precautions for user

Overland transport
Not applicable

Transport by sea
Not applicable

Air transport
Not applicable

Inland waterway transport
Not applicable

Rail transport
Not applicable

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

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU-Regulations

Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)
Contains no substance(s) listed on the REACH Candidate List
Contains no substance(s) listed on REACH Annex XIV (Authorisation List)
Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)
Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Abbreviations and acronyms:	
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
BLV	Biological limit value
BOD	Biochemical oxygen demand (BOD)
COD	Chemical oxygen demand (COD)
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC-No.	European Community number

EC50	Median effective concentration
EN	European Standard
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
OEL	Occupational Exposure Limit
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
STP	Sewage treatment plant
ThOD	Theoretical oxygen demand (ThOD)
TLM	Median Tolerance Limit
VOC	Volatile Organic Compounds
CAS-No.	Chemical Abstract Service number
N.O.S.	Not Otherwise Specified
vPvB	Very Persistent and Very Bioaccumulative
ED	Endocrine disrupting properties

Full text of H- and EUH-statements:	
Aquatic Acute 1	Hazardous to the aquatic environment – Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment – Chronic Hazard, Category 1
Aquatic Chronic 3	Hazardous to the aquatic environment – Chronic Hazard, Category 3
H315	Causes skin irritation.
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.
Skin Irrit. 2	Skin corrosion/irritation, Category 2

SDS EU (REACH Annex II) - M2i

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.