

Summary of product characteristics for a biocidal product

Product name: Permethrin Smoke Generator

Product type(s): PT18 - Insecticides, acaricides and products to control other arthropods (Pest control)

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Authorisation number: TP18-0347

R4BP 3 asset reference number: GR-0015864-0000

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Administrative information

1.1. Trade names of the product

PERMETHRIN SMOKE GENERATOR ACTIFUM

1.2. Authorisation holder

Name and address of the authorisation holder	Name	Activa s.r.l.
	Address	via Feltre, 32 20132 Milano Italy
Authorisation number	TP18-0347	
R4BP 3 asset reference number	GR-0015864-0000	
Date of the authorisation	04/06/2019	
Expiry date of the authorisation	04/06/2029	

1.3. Manufacturer(s) of the biocidal products

Name of the manufacturer	Octavius Hunt Ltd
Address of the manufacturer	Dove Lane Redfield BS5 9NQ Bristol United Kingdom
Location of manufacturing sites	Dove Lane Redfield BS5 9NQ Bristol United Kingdom

1.4. Manufacturer(s) of the active substance(s)

Active substance	1342 - Permethrin
Name of the manufacturer	LIMARU NV (Acting for Tagros Chemicals India Private Limited).
Address of the manufacturer	Tagros Chemicals India Limited "Jhaver Centre", Rajah Annamalai Building, IV Floor, 72 Marshalls Road 600 008 Egmore, Chennai India
Location of manufacturing sites	A4/1&2, SIPCOT Industrial Complex 607 005 Kudikadu, Cuddalore, Tamil Nadu India

2. Product composition and formulation

2.1. Qualitative and quantitative information on the composition of the biocidal product

Common name	IUPAC name	Function	CAS number	EC number	Content (%)
Permethrin		Active Substance	52645-53-1	258-067-9	13,5
Potassium chlorate		Non-active substance	3811-04-9	223-289-7	13,5
Talc		Non-active substance	14807-96-6	238-877-9	53

2.2. Type of formulation

FU - Smoke generator

3. Hazard and precautionary statements

Hazard statements	<p>May intensify fire; oxidiser</p> <p>May cause an allergic skin reaction.</p> <p>Very toxic to aquatic life with long lasting effects.</p>
Precautionary statements	<p>Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. - No smoking.</p> <p>Keep away from clothing and other combustible materials.</p> <p>Keep away from clothing and other combustible materials.</p> <p>Avoid breathing dust.</p>

Avoid breathing fume.

Contaminated work clothing should not be allowed out of the workplace.

Avoid release to the environment.

Wear protective gloves.

Call a POISON CENTER if you feel unwell.

Call a doctor/physician if you feel unwell.

IF ON SKIN:Wash with plenty of soap and water.

If skin irritation or rash occurs:Get medical advice.

If skin irritation or rash occurs:Get medical attention.

Wash contaminated clothing before reuse.

In case of fire:Use foam, carbon dioxide or dry powder to extinguish.

Collect spillage.

Dispose of contents to local requirements.

Dispose of container to local requirements.

4. Authorised use(s)

4.1 Use description

Use 1 - Fumigation of rooms from general public (non-professionals users)

Product type

PT18 - Insecticides, acaricides and products to control other arthropods (Pest control)

Where relevant, an exact description of the authorised use

The product is formulated with a special mix, which burns slowly without flame, producing a persistent, dense, and clean white smoke, containing the active ingredient. It is an insecticide smoke generator, based on Permethrin, effective by contact on a number of flying and crawling insects.

It is indicated for the disinfestations (flushing and killing effect) of premises where wet cleaning is NOT performed, in domestic areas and (private houses), garages, cellars, attics, voids (in walls) (use of small pack of 3.5g up to 8 m3 to control crawling insects), crawl places (use of small pack of 3.5g up to 8 m3 to control crawling insects), commercial warehouses, & in industrial places such as industrial warehouses electrical appliances and rooms and trucks or trains transporting grains that should never undergo wet cleaning.

Target organism(s) (including development stage)

Scientific name: *Musca domestica*
 Common name: House fly
 Development stage: Adults

Scientific name: *Calliphora vomitoria*
 Common name: Blow flies
 Development stage: Adults

Scientific name: *Culex pipiens*
 Common name: Mosquitoes
 Development stage: Adults

Scientific name: *Blattella germanica*
 Common name: German cockroach
 Development stage: Adults

Scientific name: *Blatta orientalis*
 Common name: Oriental cockroach
 Development stage: Adults

Scientific name: *Periplaneta americana*
 Common name: American Cockroach
 Development stage: Adults

Scientific name: *Lasius niger*
 Common name: black ant
 Development stage: Adults

Scientific name: *Ephestia kuehniella*
 Common name: Mill moth
 Development stage: Adults

Scientific name: *Plodia interpunctella*
 Common name: Indian meal moth
 Development stage: Adults

Scientific name: *Lasioderma serricorne*
 Common name: cigarette beetle
 Development stage: Adults

Scientific name: *Rhyzopertha dominica*
 Common name: Lesser grain borer
 Development stage: Adults

Scientific name: *Sitophilus granarius*
 Common name: grain weevils
 Development stage: Adults

Scientific name: *Ctenocephalides felis*
 Common name: Cat flea
 Development stage: Adults

Scientific name: *Tribolium castaneum*
 Common name: rust-red flour beetles
 Development stage: Adults

Scientific name: crawling insects
 Common name: Crawling insects
 Development stage: Adults

Scientific name: stored product pests
 Common name: stored product pests
 Development stage: Adults

Field(s) of use

Indoor

Indoor

Application method(s)

Method: Fumigation
 Detailed description:
 Ready-to-use insecticidal smoke generator

Application rate(s) and frequencies

Application Rate: see below
 Dilution (%): -
 Number and timing of application:

Housefly (*Musca domestica*) and blowfly (*Calliphora vomitoria*) (4 hours exposure):

One tin of 3.5g up to 110 m3

(The population reduction against *Calliphora vomitoria* may be achieved with a time-delay of 48 hours after application)

Mosquito (*Culex pipiens*) (24 hours exposure):

One tin of 3.5g up to 110 m3

Crawling insects (cockroaches such as *Blattella germanica*, *Periplaneta americana*, *Blatta orientalis* and ants such as *Lasius niger*) (4 hours exposure):

One tin of 3.5g up to 8 m3

One tin of 15g up to 30 m3

(The maximum population reduction when used against cockroaches may be achieved with a time-delay of 48 hours after application)

Cat fleas (*Ctenocephalides felis*) (24 hours exposure):

One tin of 15g up to 120 m3

Stored product pests such as *Ephestia kuehniella*, *Plodia interpunctella*, *Lasioderma serricorne*, *Rhyzopertha dominica* and *Sitophilus granarius* (24 hours exposure):

One tin of 3.5g up to 30 m3

One tin of 15g up to 120 m3

One application upon infestation.

No residual efficacy has been demonstrated.

Category(ies) of users

General public (non-professional)

Pack sizes and packaging material

Can /Tin, Plastic: composite: 3.5g, 15g

Can /Tin, Metal: 3.5g, 15g

Full plastic (HDPE)

External aluminium, internal papercard

External plastic, internal card paper + aluminium

4.1.1 Use-specific instructions for use

- Seal the area to be treated, locking windows and doors for not less than 4 hours
- Take the required number of smoke generators. Place them on a fire proof surface, but never in a closed space such as a bucket
- Space the smoke generators throughout the area
- Leave them working not less than 4 or 24 hours according to the target species, after which the area has to be thoroughly ventilated opening doors and windows
- The product is only for indoor use and to be strictly applied in not wet-cleaned areas.

Because resistance is well known to be a potential problem, strategies to avoid resistance are normal practice.

General advice is provided by IRAC (Anon, 1987).

The principles of strategies for managing the development of resistance are similar for permethrin as they are for other synthetic pyrethroids:

- Adopt integrated pest management methods. Where possible, application treatments should be recommended to be combined with non-chemical measures, physical control methods and other public health measures, taking into account local specificities (target species, conditions of use, etc.).
- Take into account the life cycle and characteristics of target insects to adapt treatments. In particular, target the most susceptible stage of the pest's life cycle.
- Where an extended period of control is required, treatments should be alternated with products with different modes of action.
- Products should be used in accordance with label recommendations. Always read the label or leaflet before use and follow all the instructions provided.
- The product should not be used in regions where it is known that resistance to the active substance has developed.
- In cases where it is demonstrated that application rates, correctly applied, fail to give the expected level of control, use of any product containing the same class of chemistry should cease.
- The users should inform if the treatment is ineffective and report straightaway to the authorization holder.
- Levels of effectiveness should be monitored, and instances of reduced effectiveness should be investigated for possible evidence of resistance, noting that sanitary conditions and proximity of untreated refuges can contribute to the risk of re-infestation.

4.1.2 Use-specific risk mitigation measures

Wash hand and exposed skins before and after use.

Do not use when food or food producing animals are present.

Do not reuse contaminated clothing.

Do not maintain the product in a place with heat.

Do not inhale vapour.

Remove the product from surfaces where contact is more likely after ventilation period (dry wiping).

Only indoor use.

For non-professional users:

- avoid contact with contaminated objects.
- use the product only once a week as maximum.

- Evacuate livestock prior to treatment

- Remove all food, feed and drinks prior to treatment

- Remove any cooking utensils and cutlery, any tool that may enter in contact with food/feedstuff during treatment.

- After ventilation period, wipe treated surfaces before reusing it (dry wiping).

Leave immediately after lighting smoke generators

Thoroughly ventilate areas before re-occupying for at least 8 hours

Apply only in places which are not wet-cleaned. Application in trucks or trains transporting grains should never undergo wet cleaning.

4.1.3 Where specific to the use, the particulars of likely direct or indirect effects, first aid instructions and emergency measures to protect the environment

Likely direct or indirect effects:
Allergic skin reaction and sensitization

First aid instructions:
- Relocate the individual from the exposure source and remove any contaminated/spattered clothing articles.

- Eye contact
Wash with plenty of water for at least 15/20 minutes.
Always check for and remove any contact lenses, if easy to do. Continue to rinse with tepid water for at least 15 minutes.

- Skin contact
Wash affected skin area immediately with soap and plenty of water. No scrubbing.

- Inhalation
Bring the person to open air.
Keep the individual calm and at rest, in a position comfortable for breathing. Conserve body temperature and control breathing. If necessary, check for pulse and initiate artificial respiration.

- In case of impaired consciousness place in recovery position and seek medical advice immediately.

- If symptoms appear, persist or worsen seek medical attention IMMEDIATELY and bring the packaging or label whenever possible.

- Never leave the affected individual unattended.

Advice for medical and healthcare personnel:
- Symptomatic and supportive treatment.

When asking for medical advice, keep packaging or label at hand and call your local poison control center (Insert local number here)

Environmental instructions
Avoid that the product reaches drains and penetrates into the soil. If waters or drains are polluted, inform immediately the authorities.

4.1.4 Where specific to the use, the instructions for safe disposal of the product and its packaging

-The product is not suitable for disposal in landfills.
-Incineration only in plants as toxic wastes.
-Residues and empty containers should be taken care of as hazardous waste according to local and national provisions.
Empty containers, unused product and other waste generated during the treatment are considered hazardous waste. Eliminate those wastes in accordance with current regulations.
Do not throw on unpaved floors, in watercourses, in the sink or in the drain. Do not allow runoff to sewer.
-When use non-disposable (reusable) equipment: clean equipment with damp paper and after cleaning dispose the paper used for cleaning in solid wastes.

4.1.5 Where specific to the use, the conditions of storage and shelf-life of the product under normal conditions of storage

Keep container tightly closed in cool and dry, well-ventilated place, away from children, unauthorized people, food or feed. Protect from direct solar rays. Keep far from combustion fonts and near extinguishing media. The product is stable for 24 months in the original container. Avoid storage temperature above 40 °C

4.2 Use description

Use 2 - Fumigation of rooms from trained professional users

Product type

PT18 - Insecticides, acaricides and products to control other arthropods (Pest control)

Where relevant, an exact description of the authorised use

The product is formulated with a special mix, which burns slowly without flame, producing a persistent, dense, and clean white smoke, containing the active ingredient. Is an insecticide smoke generator, based on Permethrin, effective by contact on a number of flying and crawling insects.
It is indicated for the disinfestations (flushing and killing effect) of premises where wet cleaning is NOT performed, in domestic areas and (private houses), garages, cellars, attics, voids (in walls) (use of small pack of 3.5g up to 8 m3 to control crawling insects).

Target organism(s) (including development stage)

crawl places (use of small pack of 3.5g up to 8 m3 to control crawling insects), commercial warehouses, & in industrial places such as industrial warehouses, electrical appliances and rooms and trucks or trains transporting grains that should never undergo wet cleaning.

Scientific name: *Musca domestica*
Common name: House fly
Development stage: Adults

Scientific name: *Calliphora vomitoria*
Common name: blowfly
Development stage: Adults

Scientific name: *Culex pipiens*
Common name: Mosquitoes
Development stage: Adults

Scientific name: *Blattella germanica*
Common name: German cockroach
Development stage: Adults

Scientific name: *Blatta orientalis*
Common name: Oriental cockroach
Development stage: Adults

Scientific name: *Periplaneta americana*
Common name: American Cockroach
Development stage: Adults

Scientific name: *Ephestia kuehniella*
Common name: Mill moth
Development stage: Adults

Scientific name: *Plodia interpunctella*
Common name: Indian meal moth
Development stage: Adults

Scientific name: *Lasioderma serricorne*
Common name: cigarette beetle
Development stage: Adults

Scientific name: *Ctenocephalides felis*
Common name: cat fleas
Development stage: Adults

Field(s) of use

Indoor

Application method(s)

Method: Fumigation
Detailed description:

Ready-to-use insecticidal smoke generator

Application rate(s) and frequencies

Application Rate: see below

Dilution (%): -

Number and timing of application:

Housefly (*Musca domestica*) and blowfly (*Calliphora vomitoria*) (4 hours exposure):

One tin of 3.5g up to 110 m3

One tin of 30g up to 950 m3

One tin of 60g up to 1900 m3

(The population reduction against *Calliphora vomitoria* may be achieved with a time-delay of 48 hours after application)

Mosquito (*Culex pipiens*) (24 hours exposure):

One tin of 3.5g up to 110 m3

One tin of 30g up to 950 m3

One tin of 60g up to 1900 m3

Crawling insects (cockroaches such as *Blattella germanica*, *Periplaneta americana*, *Blatta orientalis*) (4 hours exposure):
 One tin of 3.5g up to 8 m3
 One tin of 15g up to 30 m3
 One tin of 30g up to 60 m3
 One tin of 60g up to 120 m3
 (The maximum population reduction may be achieved with a time-delay of 48 hours after application)

Cat fleas (*Ctenocephalides felis*) (24 hours exposure):
 One tin of 15g up to 120 m3
 One tin of 30g up to 240 m3
 One tin of 60g up to 480 m3

Stored product pests such as *Ephestia kuehniella*, *Plodia interpunctella* and *Lasioderma serricone* (24 hours exposure):
 One tin of 3.5g up to 30 m3
 One tin of 15g up to 120 m3
 One tin of 30g up to 240 m3
 One tin of 60g up to 480 m3

One application upon infestation.
 No residual efficacy has been demonstrated.

Category(ies) of users

Trained professional

Pack sizes and packaging material

Can /Tin, Plastic: composite: 3.5g, 15g, 30g, 60g
 Can /Tin, Metal: 3.5g, 15g, 30g, 60g

Full plastic (HDPE)
 External aluminium, internal papercard

External plastic, internal card *paper + aluminium

*The cardboard with aluminium is round shaped and its purpose is to cover the product. Aluminium is placed outwards to better protect from heat sources or sparks. Before using the product, this cover must be removed and there is no possibility to reposition it later.

4.2.1 Use-specific instructions for use

- Seal the area to be treated, locking windows and doors for not less than 4 hours
- Take the required number of smoke generators. Place them on a fire proof surface, but never in a closed space such as a bucket
 - Space the smoke generators throughout the area
 - Leave them working not less than 4 or 24 hours according to the target species, after which the area has to be thoroughly ventilated opening doors and windows
 - The product is only for indoor use and to be strictly applied in not wet-cleaned areas.

Because resistance is well known to be a potential problem, strategies to avoid resistance are normal practice.

General advice is provided by IRAC (Anon, 1987).

The principles of strategies for managing the development of resistance are similar for permethrin as they are for other synthetic pyrethroids:

- Adopt integrated pest management methods. Where possible, application treatments should be recommended to be combined with non-chemical measures, physical control methods and other public health measures, taking into account local specificities (target species, conditions of use, etc.).

- Take into account the life cycle and characteristics of target insects to adapt treatments. In particular, target the most susceptible stage of the pest's life cycle.
- Where an extended period of control is required, treatments should be alternated with products with different modes of action.
- Products should be used in accordance with label recommendations. Always read the label or leaflet before use and follow all the instructions provided.
- The product should not be used in regions where it is known that resistance to the active substance has developed.
- In cases where it is demonstrated that application rates, correctly applied, fail to give the expected level of control, use of any product containing the same class of chemistry should cease.
- The users should inform if the treatment is ineffective and report straightaway to the authorization holder.
- Levels of effectiveness should be monitored, and instances of reduced effectiveness should be investigated for possible evidence of resistance, noting that sanitary conditions and proximity of untreated refuges can contribute to the risk of re-infestation.

4.2.2 Use-specific risk mitigation measures

Wash hand and exposed skins before and after use.

Do not use when food or food producing animals are present.

Do not reuse contaminated clothing.

Do not maintain the product in a place with heat.

Do not inhale vapour.

Remove the product from surfaces where contact is more likely after ventilation period (dry wiping).

Only indoor use.

For professional users: wear gloves and respiratory protective equipment when re-entering the treated areas.

- Evacuate livestock prior to treatment
- Remove all food, feed and drinks prior to treatment
- Remove any cooking utensils and cutlery, any tool that may enter in contact with food/feedstuff during treatment.
- After ventilation period, wipe treated surfaces before reusing it (dry wiping).

Leave immediately after lighting smoke generators

Thoroughly ventilate areas before re-occupying for at least 8 hours

Apply only in places which are not wet-cleaned. Application in trucks or trains transporting grains should never undergo wet cleaning.

4.2.3 Where specific to the use, the particulars of likely direct or indirect effects, first aid instructions and emergency measures to protect the environment

Likely direct or indirect effects:

Allergic skin reaction and sensitization

First aid instructions:

- Relocate the individual from the exposure source and remove any contaminated/spattered clothing articles.

- Eye contact

Wash with plenty of water for at least 15/20 minutes.

Always check for and remove any contact lenses, if easy to do. Continue to rinse with tepid water for at least 15 minutes.

- Skin contact

Wash affected skin area immediately with soap and plenty of water. No scrubbing.

- Inhalation

Bring the person to open air.

Keep the individual calm and at rest, in a position comfortable for breathing. Conserve body temperature and control breathing. If necessary, check for pulse and initiate artificial respiration.

- In case of impaired consciousness place in recovery position and seek medical advice immediately.

- If symptoms appear, persist or worsen seek medical attention IMMEDIATELY and bring the packaging or label whenever possible.

- Never leave the affected individual unattended.

Advice for medical and healthcare personnel:

- Symptomatic and supportive treatment.

When asking for medical advice, keep packaging or label at hand and call your local poison control center (Insert local number here)

Environmental instructions

Avoid that the product reaches drains and penetrates into the soil. If waters or drains are polluted, inform immediately the authorities.

4.2.4 Where specific to the use, the instructions for safe disposal of the product and its packaging

-The product is not suitable for disposal in landfills.
-Incineration only in plants as toxic wastes.
-Residues and empty containers should be taken care of as hazardous waste according to local and national provisions.
Empty containers, unused product and other waste generated during the treatment are considered hazardous waste. Eliminate those wastes in accordance with current regulations.
Do not throw on unpaved floors, in watercourses, in the sink or in the drain. Do not allow runoff to sewer.
-When use non-disposable (reusable) equipment: clean equipment with damp paper and after cleaning dispose the paper used for cleaning in solid wastes.

4.2.5 Where specific to the use, the conditions of storage and shelf-life of the product under normal conditions of storage

Keep container tightly closed in cool and dry, well-ventilated place, away from children, unauthorized people, food or feed. Protect from direct solar rays. Keep far from combustion fonts and near extinguishing media. The product is stable for 24 months in the original container. Avoid storage temperature above 40 °C

5. General directions for use

5.1. Instructions for use

see relevant section in authorised uses

5.2. Risk mitigation measures

see relevant section in authorised uses

5.3. Particulars of likely direct or indirect effects, first aid instructions and emergency measures to protect the environment

see relevant section in authorised uses

5.4. Instructions for safe disposal of the product and its packaging

see relevant section in authorised uses

5.5. Conditions of storage and shelf-life of the product under normal conditions of storage

see relevant section in authorised uses

6. Other information

The product contains also Talc and Potassium chlorate. Although neither of those substances contribute to the classification of the product, these two co-formulants are mentioned because an Occupational Exposure Limit (OEL) is available for both of them.

- The mixture contains Potassium Chlorate, which in contact with an acid gives off toxic gases.
- The mixture contains powder; all the organic powders may present an explosion hazard when dispersed in air: Observe precautions as set out in H&SAW Publication 22 HMSO 1973.
- Professional users should wear respiratory protective equipment and gloves when re-entering the treated areas.