# **Useful Facts**



Bedbug eggs are 1mm long.

Newly hatched bedbugs are become red when they have their first blood meal.



Bedbugs are averse to any light source.



Adult bedbugs can live up to 7 months.



Inflammation caused by bedbug bites is usually an allergic reaction to their saliva.





You know when you're in safe hands

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### **Bedbug Hiding Places**



# **Cleaning Advice**

Treatment Method	Temperature & Duration	Control Level
Washing machine (non-biological detergent) 3.2kg	Cool – 30°C – 30 minute wash	Did not kill Egg stages
	Hot – 60°C – 30 minute wash	Killed all life stages
<b>Tumble Dry</b> 3.2kg	Cool dry – 30 minutes	Did not kill all stages
	Hot dry – 30 minutes – 40/45°C	Killed all stages
<b>Cold Soak</b> 3.2kg	Cold water – 30 minutes	Killed adults/nymphs only
	Cold soak – 24 hours	Killed adults/nymphs only
<b>Dry cleaning</b> (perchloroethylene)		Killed all life stages
<b>Freezing</b> 2.5kg	2 hours at -17°C (8 hours to get clothes and items to -17°C, takes total 10 hours of treatment)	Killed all life stages

University of Sheffield research (R. Naylor)

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- Consult the Killgerm Bedbug Manual for detailed technical treatment advice

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Your Guide to Bedbugs

### In the UK bedbugs have increasingly become a problem!

This guide brings together tips, solutions, facts and products to help you and your customers keep these pests at bay.

### **After Treatment**

- Treated areas may be safely re-entered when the spray is dry, after about two to three hours. Then air the rooms for one hour.
- Launder all linen and clothing from the treated rooms correctly.
- Do not vacuum the treated rooms for at least two weeks.
- Keep clutter to a minimum.
- More than one treatment may be necessary for full eradication.



# **Products**

#### BUGSCENTS

The BugScent bedbug lure is an aggregation-pheromone-based lure that can be applied via the AF crawling insect monitor or SenSci Volcano. The bedbug aggregation pheromone attracts nymphs, females and males irrespective of whether they have fed or not.

#### **SENSCI VOLCANO**

A discreet and unique design with a clear bottom for easy inspection. It can be used on its own or in combination with SenSci Activ bedbug lure. An effective bed bug capture device that can be used in any environment, assisting in developing new bed bug revenue streams.

#### **CIMEX ERADICATOR**

The Cimex Eradicator is a steam generator which uses steam heated to 180°C to eliminate bedbugs. A nonchemical, non-contact, eco-friendly solution for the elimination of bedbugs.

#### **K-OTHRINE PARTIX**

A broad-spectrum suspension concentrate for use against a wide range of insects, including: indoor control of crawling insects, cockroaches, bedbugs, houseflies at rest and spiders, plus outdoor control of wasps in free hanging nests

Contains: 2.49% Deltamethrin

#### **BIOPREN 6EC**

Biopren 6EC is a broad-spectrum, natural pyrethrins and S-methoprene based, emulsion concentrate for professional use indoors as a surface spray. For the control of bedbugs and fleas, other crawling insects on surfaces, in cracks and crevices, on carpets, soft furnishings, mattresses, pet housing and pet bedding.

Contains: 6.74% w/w S-methoprene, 4.81% w/w Chrysanthemum cinerariaefolium, 10.17% w/w PBO

#### **VAZOR® PROVECTA**

Vazor Provecta is a physical mode of action "sprayable entrapping" formulation for effective control of resistant populations of crawling and flying insects. This concentrate for dilution with water acts by causing external immobilization of target insects. Vazor Provecta is an excellent alternative to traditional insecticides and functions as a resistance management tool due to the physical mode of action.

#### **VAZOR® PHEPRA CS**

A liquid microencapsulated insecticide in aqueous suspension for professional use with rapid knock down and residual effect of 12 weeks on non-porous and porous surfaces. The product is water based, non-staining and of neutral odour.

Contains: 1R-trans Phenothrin 10% w/w (100 g/l) and Prallethrin 1% w/w (10 g/l)

#### **VAZOR® DE POWDER**

Diatomaceous earth contains amorphous silica which acts on the outer layer of the cuticle of any insect it contacts. Their outer, protective coating is disrupted and the insect dies.

Contains: Silicon Dioxide



#### **VAZOR® ICE**

BugScents

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A ready-to-use freezing spray that works through cold technology (below -40°C) to eliminate most crawling and flying insects quickly and efficiently. Insects, upon direct contact with the freezing spray-jet, are controlled quickly. It does not contain insecticides and leaves no residue.



#### Cimetrol Super EW is the next generation of product for the control of insect pests. Formulated as an oil-in-

water emulsion containing a very high loading of active ingredient, it allows rapid access of the active ingredient to the insect while providing long-lasting and predictable residual control.

Contains: 25% cypermethrin, 10% tetramethrin, 20% piperonyl butoxide, 1% pyriproxyfen

#### DOMOBIOS BEDBUG TRAP

**CIMETROL SUPER EW** 

The Domobios Bedbug Trap is a ready-to-use, bedbug monitor trap that represents a new innovation in the control of bedbug populations. Developed with a leading European University, the trap was created after observation of bedbug behaviour, especially their communication and living habits.



The Lureking Bedbug Monitors offer protection before, during and after treatment. They can be slipped under or behind a bed, behind curtains or easily hidden in tight spaces around furniture. The Lureking Bedbug Monitors are a safe and non-toxic solution to monitoring bed bugs.

#### **SENSCI PYRAMID™**

The SenSci Pyramid<sup>™</sup> is a revolutionary new glueboard specifically designed for bedbugs. This design combines the efficacy of pitfall traps with the affordability of glueboards in one

#### SENSCI ACTIV VIAL LURE

The SenSci Activ Lure is an easy-touse, discreet and highly-effective bed bug attraction and capture device that can attract up to twice the amount of bedbugs to the device and be used in any environment.

# **Bedbug Life Cycle**

#### EGG

Bedbug eggs are cream in colour, approximately 1mm in length and 0.5mm wide. These tend to be laid in dark areas or crevices.

# Bedbug Laws

If a pest controller is having difficulties in gaining control of a bedbug infestation and they are unable to gain access or consent to carry out a treatment at a neighbouring property, they could ask for help from the local authority.

The Public Health Act 1936, sections 83 to 85 deal with premises which are filthy and verminous. Under section 83 of the Public Health Act 1936 local authorities are given the power to serve notice on the owner or occupier specifying the works required to eradicate the vermin and the conditions conducive to infestation. This work can be carried out in default.

It is a legal requirement under the Protection of Animals Act 1911 that the presence of pests is identified before a pesticide treatment can take place. Therefore, the initial risk assessment conducted as part of any pest control treatment must identify the insect pest species.















#### NYMPH

A smaller version of the adult form and displays a colour of partly digested blood. In the nymph stage, the bedbug increases in size from 1.3 to 5mm as it passes through 5 instars.

#### **ADULT**

Fully grown adult bedbugs are distinctive and can usually be identified immediately. They are a red/brown colour, oval shaped and wingless. Approximately 5 - 7mm in length with piercing mouthparts. Before they are fed adult bedbugs are a pale yellow/brown colour, it is after a blood meal they take on their usual darker colouring.

# **Treatment Methods**

### **Non-chemical Methods**

- Physical removal
- Vacuuming
- Heat treatment
- Steam treatment
- Freezing treatment
- Monitoring
- Mattress & pillow encasement
- Laundering process

### **Chemical Methods**

- Formulation & active ingredient
- Application of insecticides
- Resistance management
- Flushing agent

Use biocides safely. Always read the label and product information before use

PHEPRA CS