

Bed Bug Control Guide



BED BUG TREATMENT TIPS USING CIMEXA™ INSECTICIDE DUST

HOW DOES CIMEXA DIFFER FROM OTHER BED BUG PRODUCTS?

Bed bugs are very adaptable. They move much faster and travel greater distances than most people realize. Bed bugs are able to relocate from areas where pesticides have been applied in a short period of time. Research has shown that many commonly used products for bed bug control are very slow acting, include ineffective active ingredients or active ingredients to which bed bugs are resistant, and/or have a strong repellent nature driving bed bugs away from treated areas. Research on field-collected bed bugs has shown significant and increasing resistance to pyrethroids and neonicotinoids. Field testing has shown that diatomaceous earth is largely ineffective on bed bugs. Products containing diatomaceous earth, pyrethroids, and/or pyrethrins, are

repellent to bed bugs. Treatment with these products may not kill bed bugs and may cause them to relocate or disperse in response to the treatment.

CimeXa™
insecticide dust



CimeXa is a strong desiccant silica dust (absorbs water and oil), which does not contain any additional pesticide active ingredients. Since CimeXa is completely amorphous, with no crystalline content, it does not cut the exoskeleton of insects like DE, and unlike DE is non-repellent. Because of the mode of action, there is no resistance to CimeXa. CimeXa is light, which is an attribute allowing it to easily adhere and accumulate on bed bug exoskeletons. Bed bugs are unaware that CimeXa is present and they continue to reside in their normal harborage areas, leading to more rapid and complete control, even of the heaviest infestations. CimeXa quickly kills bed bugs where they live without displacement, without repellency, and without disturbing their normal behavior.

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creating the future of pest control

GETTING STARTED

To effectively eliminate bed bugs we suggest a 2-step treatment approach; (1) Kill visible bed bugs and contain the infestation by reducing bed bug movement into new areas using EcoVia EC and FenvaStar EcoCap and (2) Provide both immediate and long-term protection, exclusion, and killing using CimeXa Insecticide Dust.

HEAT TREATMENTS

Heat is an excellent treatment for bedding, clothing, soft goods and other items on which it is undesirable to apply pesticides. Full premises heat treatment is generally unnecessary when using CimeXa, though it certainly can be used if desired, bearing in mind that heat provides no residual protection at all. Unlike many pesticides, CimeXa is not affected by heat. In fact, dry, hot conditions will enhance the killing ability of CimeXa. During heat treatments, bed bugs scatter in search of cracks, crevices, and other protected areas to avoid the high temperatures. They often make their way into wall voids, door frames, furniture, and other areas that are difficult to heat and maintain temperatures high enough to kill bed bugs. When CimeXa is applied to cracks, crevices, and voids, bed bugs have no place to hide, reducing expensive callbacks and re-treatments, and increasing profits. CimeXa may be used after heat treatments in harborage areas for residual protection to prevent re-infestation, and to kill any bed bugs that may have escaped the heat.

APPLICATION METHODS AND TIPS

Dust application: Dust application provides the fastest control results. A hand duster, low volume electric duster, or brush may be used. When applying as a dust, a dust mask, gloves and eye protection are recommended. CimeXa is virtually non-toxic, but due to the strong desiccant effect, it can be temporarily drying and/or irritating.

Any liquid pesticides should be applied and allowed to dry prior to applying CimeXa. No repellents should be used where CimeXa is applied. Hand held, or low volume electric dusters can be used for wall voids, plumbing chases, behind electrical outlets, behind

carpet tack strips, and cracks and crevices. The tip of the duster should be inserted into the opening, as far as practical, and tested to ensure a void is present to minimize floating dust particles on exposed surfaces. Any overspray can be cleaned off of exposed surfaces with a damp cloth or paper towel, or soft bristle brush.

Testing has shown that CimeXa dust can be effectively applied to many surfaces with a paint brush. Various brush widths and bristle types can be used, depending on the band width and amount of dust desired. A 1 1/2 in, or 2 inch nylon polyester blend angled sash paint brush works well for most crevices and surfaces. Smaller detail brushes or artist brushes work well for fine detail work on mattresses and furniture. The brush can be "loaded" with the desired amount of CimeXa, by lightly working the brush around in a small container of CimeXa, or by applying a small layer of dust using the applicator bottle, handheld duster, or electric duster and working the dust into desired locations with the brush.



CimeXa can be mixed with water to form a slurry and sprayed on

Liquid suspension, mixed with water: "Wettable Dust"

Per the label, CimeXa is a unique dust in that it can be applied mixed with water, as a spray application. It doesn't dissolve, it forms a slurry, which when dry goes back to its white dust form. This technique is referred to as a "Wettable Dust" application by Rockwell. The most effective mixing rate is 1 oz, which equates to one cup, in 1 qt of water.



Brushing is an effective and efficient method of pushing CimeXa into cracks and crevices

CimeXa application with a brush requires:

- 1) Attention to detail.
- 2) Practice/experience. Once mastered, technicians find this to be an effective and efficient method of working CimeXa dust into and onto many harborage sites.

A typical hand actuated spray bottle is ideal for this application. If a compressed air sprayer is dedicated to applying CimeXa, 4 oz or 4 cups per gallon of water should be used and fine mesh screens should be removed.

When applying CimeXa in the wettable dust form, it is best to spray the intended site with two light coats. The first coat should be sprayed and let dry, then a second light coat sprayed. This method allows the CimeXa dust to 'sit up' on the treated surface, ensuring maximum product pick up as the bed bug walks through the CimeXa. As noted, CimeXa is non-repellent. Any bed bugs missed during application, or new infestations, will readily reside in the treated harborage sites ensuring a lethal dose.

For best results, CimeXa should be mixed as follows:

1. Add approximately half of the required amount of water to the bottle/tank.
2. Add the appropriate amount of CimeXa.
3. Close application equipment and agitate or shake the tank until dust is wetted and a slurry is formed.
4. Add the remaining water and agitate or shake again before use to ensure thorough mixing.

Note: Shake or re-agitate application equipment before use if application is interrupted to ensure the product is thoroughly mixed. Mix only the amount of application volume as required. Do not store wettable dust spray mixture overnight.

EcoVia EC: EcoVia EC is a highly effective broad spectrum botanical insecticide developed to meet customer and regulatory demand for green pest management solutions. EcoVia EC has been shown to quickly kill and repel bed bugs, including bed bugs resistant to pyrethroids and is a valuable tool for direct kill of bed bugs and preventing the spread of bed bugs from currently infested areas to non-infested areas. It is ideal for treating areas that cannot be treated with dust. To increase the longevity and repellent nature of EcoVia EC, FenvaStar EcoCap, a micro-encapsulated esfenvalerate which may be sprayed on carpet, may be tank-mixed with EcoVia EC to offer extended repellency in non-infested areas.

APPLICATION SITES

Visible/Exposed Surfaces:

Any surface that is visible, or more correctly, exposed, should be treated with CimeXa only if cracks and

crevices are present that can potentially harbor bed bugs. To minimize residue on exposed surfaces the operator should use the application method with which he or she is most comfortable. EcoVia EC may be used to quickly kill bed bugs that are present where no harborage sites or cracks and crevices are visible or accessible. Other key areas for repellent treatment include adjacent rooms where bed bugs have not been detected, and areas of the home where bed bugs may be inadvertently carried from harborage areas, such as bathrooms, laundry rooms, garages and storage areas, etc. For extended protection, EcoVia EC and FenvaStar EcoCap should be tank mixed at 1 oz per gallon each and applied to the areas noted.

made considering the type of material, infestation level, and likelihood of bed bugs choosing the location as a harborage or travel pathway.

Carpet: Research has demonstrated that CimeXa applied in the dust form and then worked into the carpet with a brush is an effective method of control. CimeXa should be applied in a manner that leaves minimal visible residue. Applications should be focused on infested areas and areas directly adjacent to infested areas. Extremely light applications to carpet have been shown to be effective. (EcoVia EC should be used in other areas not directly adjacent to or in infested areas.) A very light application applied in a 6" band onto carpet around the perimeter of rooms can provide protection against re-infestation in susceptible accounts.



Bed bugs are masters of hiding in frames, tufts, and folds of furniture

Hidden Surfaces (Non-visible surfaces): Hidden surfaces include all voids, behind baseboards, all internal and rear sides of furniture, appliances, wall hangings, or other furnishings. In these instances, the dry dust application, using a duster or brush, is the best method of applying CimeXa.

Porous Surfaces: These surfaces include carpet, fabric surfaces, unfinished wood, fiberboard, and concrete. In these instances, a decision should be

Fabric, Mattresses, Box Springs, Stuffed Furniture, Leather:

The mattress is most effectively treated with the brush technique along edges, tufts, and folds. However, the wettable dust (spray) method can be utilized as long as two light coats are applied. Box springs, sofas and similar furniture can be treated by one of two methods, depending on its condition. If the box spring, or other furniture is in new condition and the cambric (dust cover

on the bottom) is not torn, a hand held or electric duster will quickly cover the inside with one application from each corner. The duster's extension can be placed between stapled portions of the cambric or staples removed for better access. If the cambric is not intact, the wettable dust (spray) application is the best method to achieve thorough coverage while reducing the potential for dust drift in the room. Two light coats should be applied to the wood/metal framing and any other areas where bed bugs are detected. CimeXa should be brushed into tufts and creases of upholstered furniture. Any removable portions of furniture such as throw pillows and seat cushions should be laundered or heat treated.

Unfinished Wood or Fiber Board: Generally, these surfaces are located on the rear, bottom, and interior of furniture, including headboards that are attached to the wall, as is common in hotels.

Dust can be applied carefully as long as dust drift is minimized, and any visible residual dust is cleaned from visible exterior surfaces. Spraying and brushing are the preferred methods, as the application is precise, and the dust is directed into the harborage areas.

Concrete: Concrete surfaces should be treated with a light coat of dust unless air movement in the room, heat treatments or A/C will blow the dust. If so, the wettable dust (spray) method is preferred. Alternatively they can be sprayed with the referenced mixture of EcoVia EC and FenvaStar EcoCap, if visible dust residue is a problem.

Non-Porous Surfaces

Finished Wood: The finished wood surfaces of furniture should not be treated with CimeXa or liquid insecticides.

Metal Bed Frames, or Metal Furniture: The best method for treating metal surfaces is the wettable dust (spray) method. This will assure a consistent coating that adheres to the slick surface. If voids such as hollow legs are found in the furniture, CimeXa should be applied as a dust using a handheld or electric duster.

Floors: Hard surface floors, other than concrete should not be treated. If bedbugs are found on these surfaces, physical removal, using a vacuum is the preferred method.

Wall Hangings - Pictures, Paintings, etc.: Care should be taken before treating decorative wall hangings such as pictures, and paintings. It is important to know the difference between a picture and a painting. It is not recommended to treat paintings, as they are all priceless! Physical methods of removal, such as vacuuming with extreme care, can be used to remove bed bugs and eggs from paintings. For picture frames and wall hangings, the preferred treatment method is to brush CimeXa onto the edges, joints and crevices.

Window Coverings - Curtains, Curtain Rods, Drapes, Blinds: Curtains or drapes should be heat treated or run through a clothes dryer if possible. If they cannot be dried, careful inspection will reveal any bed bugs and physical removal is preferred. If chemical treatment is necessary, CimeXa dust may be brushed into folds, hems and tufts, or EcoVia EC may be sprayed sparingly, assuming a test treatment shows no staining. Vertical or horizontal blind tracks can be lightly dusted. However, the blinds on the track should be adjusted to reduce any dust drift. The inside of hollow curtain rods, curtain hangers, and drapery holdbacks or ties should be dusted.

Wall Voids, Plumbing Chases, Behind Electrical Outlets, Carpet Tack Strips: These sites are best treated with a hand held or electric duster.

EcoVia™ EC
emulsifiable concentrate

KILLS PYRETHROID AND NEONIC RESISTANT BEDBUGS IN AS LITTLE AS 15 MINUTES



Research-based botanical insecticide, EPA Exempt 25(b) product

Works as an enclosed space fumigant

Mixes and stays in solution easily, like a traditional synthetic insecticide

Minimal fragrance at label application rates

