

Avenger Organics® Natural Bed Bug Killer



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- Avenger Organics® Natural Bed Bug Killer is a 100% natural, non-pesticide solution that kills adult bed bugs, by breaking down their exoskeleton
- Made from clove and peppermint oil, it is safe to use around children & pets
- Spray on mattresses, bedding, carpets, furniture, curtains, clothing and any other infested areas
- Great for use in: Homes, Apartments, Condos, Hotels, Cruise Ships, Hospitals, Nursing Homes, Shelters, College Dorms, Movie Theaters and Offices



Avenger Organics® Natural Bed Bug Killer

- Easy To Use
- Biodegradable
- Safe for indoor/outdoor use
- 100% EPA exempt ingredients
- Kill rate of 98% within 30 minutes*
- 100% mortality 3 days later*
- Will not stain fabric
- Pleasant aroma
- Made in the USA



* Based on 3 trigger pull study – [Snell Report 2009](#).

Avenger Organics® Natural Bed Bug Killer Luggage Spray

Avenger Organics® Natural Bed Bug Killer - Luggage Spray is a 100% natural solution that kills and deters bed bugs. Apply to luggage and other personal belongings.

- Easy To Use
- Made from natural extracts
- Biodegradable
- Will not stain fabric
- Pleasant aroma
- 100% EPA exempt ingredients
- Made in the USA



100% Natural EPA Exempt Ingredients

- Avenger Organics® Natural Bed Bug Killer and Luggage Spray contains only 100% EPA exempt ingredients. This product and its ingredients have satisfied the conditions to qualify for exemption from registration under 25(b) of FIFRA.
- According to the EPA (2009): “Minimum risk pesticides are a special class of pesticides that are not subject to federal registration requirements because their ingredients, both active and inert, are demonstrably safe for the intended use.”
- “Minimum risk pesticides that meet certain criteria are exempt from federal registration under section 25(b) of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA).”
 - United States Environmental Protection Agency. Criteria for FIFRA 25b Exemption. (2009, December) Retrieved on February 1, 2013 the United States Environmental Protection Agency web site.
http://www.epa.gov/oppbppd1/biopesticides/regtools/25b_list.htm



Snell Scientifics, LLC Efficacy Report

- In September 2009, Snell Scientifics, LLC in Meansville, GA conducted treatment testing on Avenger Organics® Natural Bed Bug Killer
- With a **Three Trigger Pull**, an mortality rate of 98% was achieved within 30 minutes after application
- Upon completion of the study, Avenger Organics® Natural Bed Bug Killer had 100% mortality rate
- **Conclusion:** Avenger Organics® Natural Bed Bug Killer is an effective pesticide when sprayed on bed bugs (*Cimex lectularius*)
- Due to pending EPA revised standards, Snell Scientifics conducted a subsequent **Two Trigger Pull** treatment testing on Cutting Edge Formulations Private Label equivalent of Avenger Organics® Natural Bed Bug Killer, *Mattress Fresh* in February of 2013, .
- With a **Two Trigger Pull**, a mortality rate of 83% was shown within 2 hours after application
- Upon completion of the study, *Mattress Fresh* had an 98% mortality rate
- **Conclusion:** Avenger Organics® Natural Bed Bug Killer mortality rate increased over time throughout the course of a **Two Trigger Pull** treatment, making this an alternative to a **Three Trigger Pull** for Monthly Maintenance treatments detailed on [slide 10](#).

Mortality Rate – 2 Trigger Pull

80% -- 1 hour after application
90% -- 6 days after treatment
98% -- 15 days after treatment



Snell Scientifics, LLC Efficacy Report

Bed Bug Mortality Results – Three Trigger Pulls



Client: Cutting Edge Formulations
Project: Bed Bug Toxicity 2009
Project Code: CuttingEdgeBBDirect09
Test Method: 311.00

Date: September 2009

Table 3.

Average % Mortality of Bed Bugs (<i>Cimex lectularius</i>) Following a 3 Trigger Pull Direct Spray Application of Natures Avenger Organics Natural Bed Bug Killer (4 Reps of 10 Bed Bugs per Rep)									
Rep	Cond.	30 min	1 hr	2 hr	4 hr	24 hr	2 DAT	3 DAT	4 DAT
A	Alive	10%	10%	10%	10%	10%	0%	0%	0%
	KD	0%	10%	0%	0%	0%	10%	0%	0%
	Dead	90%	80%	90%	90%	90%	90%	100%	100%
B	Alive	0%	0%	0%	0%	0%	0%	0%	0%
	KD	0%	0%	0%	0%	0%	0%	0%	0%
	Dead	100%	100%	100%	100%	100%	100%	100%	100%
C	Alive	0%	0%	0%	0%	0%	0%	0%	0%
	KD	0%	0%	0%	0%	0%	0%	0%	0%
	Dead	100%	100%	100%	100%	100%	100%	100%	100%
D	Alive	0%	0%	0%	0%	0%	0%	0%	0%
	KD	0%	0%	0%	0%	0%	0%	0%	0%
	Dead	100%	100%	100%	100%	100%	100%	100%	100%
Avg. % Dead		98%	95%	98%	98%	98%	98%	100%	100%



Snell Scientifics, LLC Efficacy Report

Untreated Bed Bug Sample Results – Two Trigger Pulls



Client: Cutting Edge Formulations
Project: Bed Bug Direct Spray 13
Project Code: CuttingEdgeBBDirect13
Test Method: 311.00

Date: February 2013

Average % Mortality of Bed Bugs (*Climex lectularius*) Following a 2 Trigger Pull Direct Spray Application of Cutting Edge Formulations' Mattress Fresh (1 Rep of 10 Bed Bugs per Rep)

Rep	Conod.	Pre-trt	30 min	1 hr	2 hr	4 hr	24 hr	2 DAT	3 DAT	4 DAT	5 DAT
A	Alive	100%	27%	20%	18%	18%	17%	15%	15%	15%	13%
	Dead	0%	73%	80%	83%	83%	83%	85%	85%	85%	88%
	Control	0%	0%	0%	0%	0%	0%	0%	0%	0%	3%
Avg. % Dead		0%	73%	80%	83%	83%	83%	85%	85%	85%	88%

Mortality Rate – 2 Trigger Pull

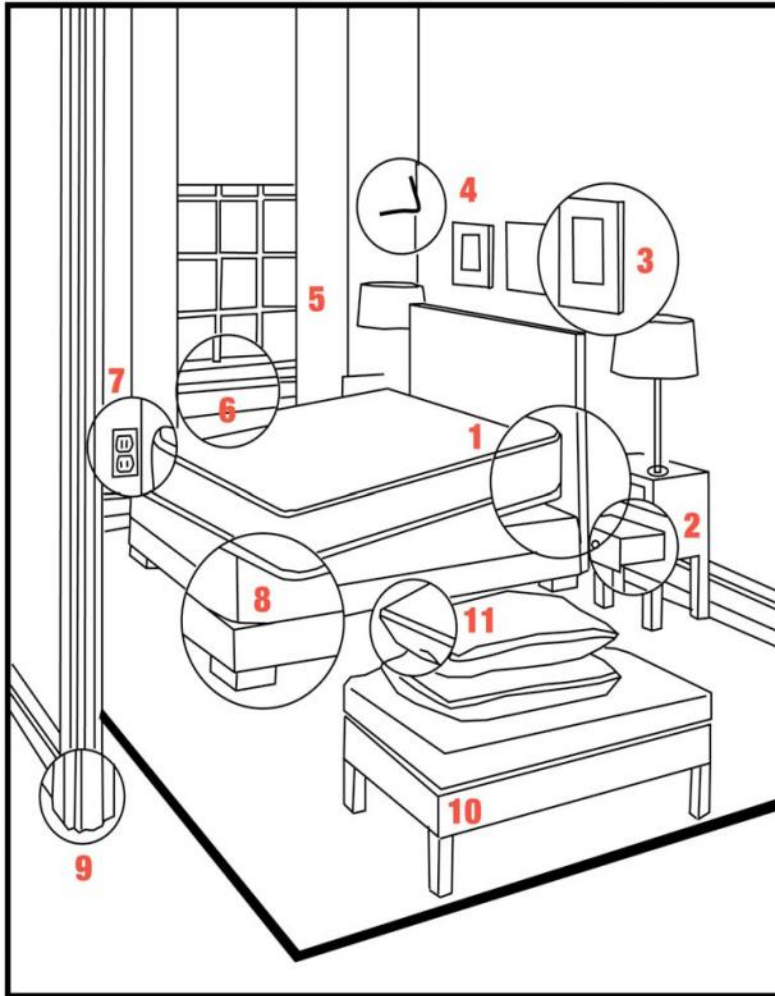
80% -- 1 hour after application
90% -- 6 days after treatment
98% -- 15 days after treatment

Avenger Organics® Natural Bed Bug Killer is proven to kill bed bugs quickly and keeps working days after the initial treatment is applied.



General Directions for Use

Places to spray where bed bugs can hide and repopulate.



Shake well before using. For best results, shake vigorously. Spray directly onto bed bug infested areas including bedding, carpet, walls, cracks, crevices, interior of night stands and dresser drawers. Follow up within 1-2 weeks after application in the same areas.

- Avoid contact with skin and eyes
- May burn some susceptible plants
- Always test area before full application

Avenger Organics® Natural Bed Bug Killer Sq. Ft. Coverage *		
Sq. Ft.	Oz.	Sq. Ft. Coverage per Oz.
432	24	18

* Based on 3 trigger pulls.

Recommended Maintenance and Prevention of Bed Bugs in Hotels, Nursing Homes, Shelters etc.

Who:

- Housekeeping and Maintenance

When:

- 2 times, per week, per room for the first month
- 2 times, per month, per room for subsequent months

Where:

Housekeeping (bi-weekly)

- Mattress edges and box springs
- Behind headboard
- Inside drawers and furniture next to bed

Maintenance (monthly)

- Thoroughly spray whole room including all pieces of furniture
- Check for holes caused by normal wear and tear in cushions, mattresses or any other place bed bugs can hide including beds, behind picture frames, drapes & any other cracks & crevices
- This will also help to kill and eggs and larvae that have been left behind

How:

Housekeeping and Maintenance (24 oz. bottle)

- 3 trigger squirts per sq. ft until the whole mattress is sprayed
- 3 trigger squirts per sq. foot for headboards, drawers, chairs next to bed (including indentation of cushions)

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Avenger Organics® Natural Bed Bug Killer and Luggage Spray is available in:

- 3 oz. Ready To Use (RTU) Travel Spray
 - TSA approved
- 24 oz. RTU Spray
- 1 Gallon RTU Spray
- (2) 2.5 Gallon RTU
- Retail Bundle Packs



Retail Bundle Packs

Two-Pack Travel Ready BUDDYPAK

- (1) 3 oz. Avenger Organics® Natural Bed Bug Killer Spray
- (1) 3 oz. Avenger Organics® Bed Bug Killer Luggage Spray
 - Packaged in a convenient travel ready clear plastic bag
 - TSA approved bottles



Travel BUDDYPAK

- (2) 3 oz. Avenger Organics® Natural Bed Bug Killer Spray
- (2) 3 oz. Avenger Organics® Bed Bug Killer Luggage Spray
 - TSA approved bottles

Retail Bundle Packs

BUDDYPAK

- (4) 3 oz. Avenger Organics® Natural Bed Bug Killer Spray
 - TSA approved bottles



9 - Pack Counter Display

- (9) 3 oz. Avenger Organics® Natural Bed Bug Killer Spray
 - TSA approved bottles

