

US EPA ARCHIVE DOCUMENT

PRODUCT PERFORMANCE / EFFICACY REVIEW

Mark Suarez, Entomologist - IB

DATE: 18 March 2009

EPA REG. NUMBER: 83122-1
PRODUCT NAME: Pro-Tek 50 Fabric/Apparel (Garment) Treatment
REGISTRANT: Garnik Industries Inc.

PM: PM13
REVIEWER: Olga Odiott

DECISION #.: 397129
DP BARCODE: 359726
ACTION: R340

ACTIVE INGREDIENT(S): 1009701, Permethrin.....0.52%

TYPE: Fabric Treatment

OPPTS GUIDELINE(S): 810.3000

MRID: 47484601 Submitted GLP? No.

SITES & PESTS Fabric Bed Bugs

LABEL APPLICATION RATES: 0.52% fabric

AI APPLICATION RATES: 0.52% fabric

STUDY APPLICATION RATES: 0.52% fabric

STUDY SUMMARIES:

MRID 47484601. Gaynor, W. (2008) Efficacy of Pro-Tek 50, A Permethrin-Impregnated Fabric, For Killing Bed Bugs. Project Number: 427/0030, 427/0032, 427/0033. Unpublished study prepared by ICR, Inc. 47 p.

The data submitted were generated from a laboratory study in which the target species, bed bugs, were forced to contact a fabric covered surface for 24 hours. Ten replicates each of treated fabric, unlaundered fabric, treated fabric that had been laundered 25 times, untreated, unlaundered fabric, and untreated fabric laundered 25 times were run. After 24 hours, the insects were moved to clean jars lined with untreated paper towel. Control mortality over the 48 hour trial was within acceptable parameters.

The results of the experiment are reported below.

Treatment	Washes	% Permethrin	% Mortality	
			24	48
Treated fabric	0	0.48	100	99
Treated fabric	20	--	100	87.7
Treated fabric (sized)	20	--	100	32.8
Treated fabric	25	0.28	100	98.0

ENTOMOLOGIST’S COMMENTS AND RECOMMENDATIONS:

The registrant provided a revised label for the application to add bed bugs to the label of Pro-Tek 50 Fabric/Apparel Garment Treatment. The proposed labeling includes claims against bed bugs when the fabric is used to manufacture bed bands, dust ruffles, headboard backing, or box spring protectors, but excludes claims on apparel or garments.

These claims are generally acceptable, but must be qualified on the labeling.

1. The items must be produced without the addition of sizing or other fabric treatments.
2. The label must state that use of fabric treatments will reduce the effectiveness of the product.
3. The products must be made entirely of treated fabric, stitching, elastic, and zippers excluded.
4. The products must clearly state on the front panel that the product will kill bed bugs that remain in contact with treated fabric for at least 24 hours.
5. Marketing claims proposed are addressed below. Comments are in italics and additions to the marketing text are underlined.
 - a. Kills bed bugs that [live][remain][stay] in contact with treated [bed band][dust ruffle][headboard backing][box spring protector]
 - b. Bed bugs come out to feed on human hosts – *acceptable statement of fact*
 - c. Bed bugs typically feed at night– *acceptable statement of fact*
 - d. Bed bugs may hide in your back board and lay eggs – *should this read headboard?*
 - e. Blood taken from humans is the food of bed bugs– *acceptable statement of fact*
 - f. Bed bugs bites may cause welts which become irritated, inflamed and itchy– *acceptable statement of fact*
 - g. Bed bugs colonies may cause offensive odors– *acceptable statement of fact*

- h. Female bed bugs can lay over 200 eggs in their lifetime– *acceptable statement of fact*
- i. Newly hatched bed bugs begin feeding immediately– *acceptable statement of fact*
- j. Bed bugs have a piercing beak– *acceptable statement of fact*
- k. Treated fabric has no odor and is washable up to 20 times
- l. Kills bed bugs between your box spring and mattress – *(for Box Spring Protector and Dust ruffle only)*
- m. Kills bed bugs that hide in contact with treated headboard backing in your headboard corners, frame and folds – *This claim must be modified to include the italicized text*
- n. “New” – *for up to 6 months from the date of first distribution*
- o. Kills bed bugs that [live][remain][stay] in contact with treated [bed band][dust ruffle][headboard backing][box spring protector]. Insecticidal (killing) action remains effective for up to 20 washings.

Enclosure
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