

PM 14 48099-1 199

US ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF PESTICIDES PROGRAMS
REGISTRATION DIVISION (75-767)
WASHINGTON, DC 20460

EPA REGISTRATION NO.

48099-1

DATE OF ISSUANCE

FEB 15 1995

TERM OF ISSUANCE

NOTICE OF PESTICIDE: REGISTRATION
 REREGISTRATION

(Under the Federal Insecticide, Fungicide,
and Rodenticide Act, as amended)

NAME OF PESTICIDE PRODUCT

Bear Skunker

NAME AND ADDRESS OF REGISTRANT (Include ZIP code)

Bear Country Products
144 Commercial Street
Sunnyvale, CA 94086

481877 116
18

NOTE: Changes in labeling formula differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above U.S. EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby Registered/Reregistered under the Federal Insecticide, Fungicide, and Rodenticide Act.

A copy of the labeling accepted in connection with this Registration/Reregistration is returned herewith.

Registration is in no way to be construed as an indorsement or approval of this product by this Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is unconditionally registered in accordance with FIFRA sec. 3(c)(5), provided that you:

- A. Make the following changes to your labeling prior to releasing the product for shipment:
 1. On the Front Panel of your Carton and Can labels, change "Statement of Practical Treatment" to "First Aid".
 2. On your Carton and "Bear Skunker Instructions", after "University of Montana Bear Research Foundation" add "(see enclosed bulletin entitled "The Bear Skunker Story".) Delete the asterisk, "*".
 3. In your "Instructions", you need to retain its full title, "Bear Skunker Instructions", because you refer to this title on your carton and can labels. We assume that these instructions will be placed inside the carton but outside of the can.

ATTACHMENT IS APPLICABLE

SIGNATURE OF APPROVING OFFICIAL

DATE

FEB 15 1995

4. In your "The Bear Skunker Story" bulletin, you need to retain its full title because you will be referring to this title on your carton label and because you need to distinguish this document from the "Bear Skunker Instructions", which will also be placed inside the carton but outside of the can.

5. Change the first sentence of the "INTRODUCTION" of the "Bear Skunker Instructions" to read

"BEAR SKUNKER is designed to deter the approach of curious or aggressive bears which may be encountered while camping, hiking, fishing, or hunting."

6. In the first sentence of the last paragraph of "The Bear Skunker Story", change "out" to "our".

B. Submit one copy of your final printed labeling before you release the product for shipment. Refer to the A-79 Enclosure for a further description of final printed labeling.

This registration will be subject to cancellation in accordance with FIFRA sec. 6(e) if you do not comply with these conditions. Your release for shipment of the product constitutes acceptance of these conditions.

A stamped copy of the label is enclosed for your records.

RAF

Robert A. Forrest
Product Manager (14)
Insecticide-Rodenticide Branch
Registration Division (H7505C)

Enclosures: 1) Stamped label
2) A-79 Enclosure

Peacock WP#4:BEARSKUN.NOT:REG-NOT.2:305-5407,-6600:2/15/95

A BEAR DETERRENT.

Read "Bear Skunker Instructions" before using.

BEAR SKUNKER

KEEP OUT OF REACH OF CHILDREN
CAUTION. See Back Panel for Statement of Practical Treatment, Flammability Statement, and Other Precautionary Statements.

Active Ingredients:
Diethyl Sulfide 7.3%
1-Butanethiol 43.7%
Inert Ingredients 49.0%
TOTAL 100.0%
Net contents, 2 fluid ounces (60ml)

PRECAUTIONARY STATEMENTS

CAUTION

Harmful if swallowed and causes eye irritation. Do not get in eyes or on clothing.

FIRST AID

IF SWALLOWED, drink 2 or 3 glasses of water and induce vomiting by touching back of throat with a finger. Do not induce vomiting or give anything by mouth to an unconscious person. Call a physician or poison control center immediately.

IF IN EYES, flush with plenty of water. Call a physician if irritation persists.

IF INHALED, move victim to a well-ventilated area with fresh air.

PHYSICAL OR CHEMICAL HAZARDS

FLAMMABLE. Keep away from heat, open flame or cigarettes. Do not burn or incinerate.

DIRECTIONS FOR USE. It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Note: BEAR SKUNKER contains a foul odor that is not easily removed from clothing or skin. See CLEANUP PROCEDURES in "BEAR SKUNKER INSTRUCTIONS."

To open can containing Bear Skunker, pull leather thong attached to lid with a screwdriver. Turn out the plastic squeeze container filled with active Bear Skunker. Flip up spout, aim at bear's face, and squeeze using both hands. Become proficient with the practice squeeze bottle before actual use of the active BEAR SKUNKER in the field. See the "BEAR SKUNKER INSTRUCTIONS" for complete use directions.

STORAGE AND DISPOSAL

Storage: Store only in original container, in a dry place inaccessible to children and pets. Do not use two (2) years after the date printed on can bottom. Dispose of unused can as indicated below.

Pesticide Disposal: Dispose of any liquid remaining in squeeze container after bear encounter by squirting the liquid into a hole. Cover with dirt.

Container Disposal: Do not reuse containers. Containers should either be buried at the campsite under one (1) foot of soil or double sealed in plastic, securely wrapped in newspaper, and discarded in trash.

Manufactured by **BEAR COUNTRY PRODUCTS** Sunnyvale, CA 94086
EPA Registration No. 48093-1 EPA Est. No. 48099-CA-01

ACCEPTED
with COMMENTS
by EPA Letter Board
FEB 15 1995
Under the Federal Insecticide,
Fungicide, and Rodenticide Act
as amended, for the pesticide
registered under EPA Reg. No.
48099-1

BEST AVAILABLE COPY

▲
CARTON
FRONT & BACK

2/952/95

▲
CARTON
SIDE

2/952/95

A BEAR DETERRENT. Do not seek out encounters with bears!
 Read "Bear Skunker Instructions" before using

BEAR SKUNKER

| | | |
|---------------------|---------------|---|
| Active Ingredients: | | KEEP OUT OF REACH OF CHILDREN |
| Dethyl Sulfide | 7.3% | CAUTION. See Back Panel for Statement |
| 1-Butanol | 43.7% | of Practical Treatment, Flammability Statement, |
| Inert Ingredients | 49.0% | and Other Precautionary Statements. |
| TOTAL | 100.0% | |

Net contents 2 fluid ounces (60ml)

PRECAUTIONARY STATEMENTS

CAUTION

Harmful if swallowed and causes eye irritation. Do not get in eyes or on clothing.

FIRST AID

IF SWALLOWED, drink 2 or 3 glasses of water and induce vomiting by touching back of throat with a finger. Do not induce vomiting or give anything by mouth to an unconscious person. Call a physician or poison control center immediately. IF IN EYES, flush with plenty of water. Call a physician if irritation persists. IF IRRITATED, move victim to a well-ventilated area with fresh air.

PHYSICAL OR CHEMICAL HAZARDS

FLAMMABLE. Keep away from heat, open flame or campfires. Do not burn or incinerate.

DIRECTIONS FOR USE: It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Note: BEAR SKUNKER contains a foul odor that is not easily removed from clothing or skin. See **CLEANUP PROCEDURES** in "BEAR SKUNKER INSTRUCTIONS."

To open can containing Bear Skunker, pull

leather thong attached to lid with a smooth, even motion. Take out the plastic squeeze container filled with active Bear Skunker, flip up spout, aim at bear's face, and squeeze using both hands.

Become proficient with the practice squeeze bottle before actual use of the active BEAR SKUNKER in the field. See the "BEAR SKUNKER INSTRUCTIONS" for complete use directions.

STORAGE AND DISPOSAL

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Manufactured by
BEAR COUNTRY PRODUCTS
 Sunnyvale, CA 94086

EPA Registration No. 48099-1 EPA Est. No. 48099 CA 01

▲
CAN LABEL

FRONT

2/95

▲
CAN LABEL

BACK

2/95

BEST AVAILABLE COPY

ACCEPTED
 with COMMENTS
 by EPA Letter Dated

FEB 15 1995

Under the Federal Insecticide,
 Fungicide, and Rodenticide Act
 as amended, for the pesticide
 registered under EPA Reg. No.
 48099-1

4077

ACCEPTED
with COMMENTS
in EPA Letter Dated

FEB 15 1995

Under the Federal Insecticide,
Fungicide, and Rodenticide Act
as amended, for the pesticide
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48099-1

INTRODUCTION

BEAR SKUNKER[®] is designed to deter the approach of curious bears which may be encountered while camping, hiking, fishing or hunting

BEAR SKUNKER[®] was inspired by the skunk's success in protecting itself from attack by large predators by its spray of scent. The foul odor of BEAR SKUNKER[®] is similar in chemistry and odor to natural skunk scent and has been field tested by the University of Montana Bear Research Foundation. These tests show that bears tend to avoid BEAR SKUNKER[®] when they are exposed to it. DO NOT expect BEAR SKUNKER[®] to make you absolutely "bear proof"; also DO NOT feel free to seek out encounters with bears.

THE PACKAGE

The package contains

- 1) A plastic squeeze bottle filled with water (for practice purposes)
- 2) A sealed pull-top can containing an identical squeeze bottle filled with active BEAR SKUNKER[®] ingredients
- 3) A leather thong for quick release of the pull-top mechanism

BEST AVAILABLE COPY

DIRECTIONS FOR USE

PRACTICE BEFORE LEAVING HOME

The practice container is included to enable the user to get the feel of operating the nozzle spout and squeeze bottle before going to the wilderness.

The accompanying illustration shows the recommended way to hold the squeeze bottle. Note that both hands are used for greater pressure, better aim and maximum distance. It is suggested that, with practice, one should be able to hit a pie plate at a distance of 15 to 20 feet.

REFILLING WITH WATER

To refill the practice container with water:

- 1) extend the spout.
- 2) completely depress the plastic container
- 3) while depressed as above (2), fully submerge the assembly in container of water

WHILE HOLDING BOTTLE UNDER WATER...

- a) release pressure on bottom then
- b) pull on bottom of container until it assumes normal, undepressed proportions

ACTUAL EMERGENCY USE OF BEAR SKUNKER® TO DETER AGGRESSIVE OR CURIOUS BEARS

- 1) Do not open the pull-top can until you are convinced that an encounter with the bear cannot be avoided
- 2) Pull can loose from rubber band harness
- 3) To open can, pull the attached leather thong with a smooth, even motion. Then remove the plastic container filled with active BEAR SKUNKER®. Note that the can contains excess liquid, this should alert the bear to the BEAR SKUNKER® scent as soon as the can is opened
- 4) As a first step, flip up the spout, then (using both hands as recommended) squirt a small amount of BEAR SKUNKER® on the ground between yourself and the bear. If this fails to deter the bear's aggressiveness, squeeze the plastic container (both hands) and immediately spray BEAR SKUNKER® in the bear's face when the animal is within spray reach (15-20 feet). Watch the bear's reaction carefully and be prepared to respray the bear if necessary. After spraying BEAR SKUNKER®, continue to face the bear and withdraw slowly. Be careful to avoid tripping and falling. **DO NOT RUN!**
- 5) Use the enclosed plastic lid to temporarily reclose the BEAR SKUNKER® can after it has been opened

PRECAUTIONARY STATEMENTS

CAUTION

Harmful if swallowed and causes eye irritation. Do not get in eyes or on clothing.

FIRST AID

IF SWALLOWED, drink 2 or 3 glasses of water and induce vomiting by touching back of throat with a finger. Do not induce vomiting or give anything by mouth to an unconscious person. Call a physician or poison control center immediately.

IF IN EYES, flush with plenty of water. Call a physician if irritation persists.

IF INHALED, move victim to a well-ventilated area with fresh air.

PHYSICAL OR CHEMICAL HAZARDS

FLAMMABLE: Keep away from heat, open flame or campfires. Do not burn or incinerate.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

CLEANUP PROCEDURES FOR REMOVING/DILUTING

Method No. 1 (Liquid or Dry Bleach)

- Dilute according to package instructions to proper strength
- Spread diluted bleach over exposed skin
- Immediately rinse off with water
- Wash affected area again with soap and water

Method No. 2

- Spread over
- Allow to dry
- Rinse off
- Wash all
- Individual
- hamburger

Background material is given in a supplemental bulletin provided with each BEAR SKUNKER®.
Reference also: BEAR DETERRENT TESTS
C. Hunt and C. Jonkel Border Bear Project, U.S. Fish and Wildlife Research Foundation, September 1985.
EPA Registration No. 48095
EPA Est. No. 48099 CA 0



INSTRUCTIONS
INSIDE LEFT

2-95

BEST AVAILABLE

INSTRUCTIONS
INSIDE RIGHT

2-95

Note: BEAR SKUNKER® is a trademark of the manufacturer.

To open can, pull the attached leather thong with a smooth, even motion. Then remove the plastic container filled with active BEAR SKUNKER®. Note that the can contains excess liquid, this should alert the bear to the BEAR SKUNKER® scent as soon as the can is opened.

STORAGE

Storage: Store in a cool, dry place. Do not use if the printed or stamped information on the can is in any way illegible.

Pesticide: This product remains effective for up to 12 months after the date of manufacture. Cover with a plastic bag.

CONTAINER

Container: This product is packaged in a plastic container. The container is sealed in a plastic bag and placed in a newspaper.

By Roy Olander
President, Bear Country Products

By Roy Olander, President, Bear Country Products

▲
STORY
ADD TO FRONT
2/95

ACCEPTED
with COMMENTS
in EPA Letter Dated

FEB 15 1995

Under the Federal Insecticide,
Fungicide, and Rodenticide Act
as amended for the products
registered under EPA Reg. No.

48099-1

...ing, Bear
SKUNKER to
... deterrent
...ity to defend
...ray of scent
...NKER to
... DO NOT

feel free to seek out encounters with bears

PACKAGING

Packaging was the first problem to be overcome because the product is based upon the same chemistry as natural skunk scent. Mammals, including humans, are so sensitive to skunk odor that ordinary packaging cannot contain the scent. Aerosol spray cans are an obvious first choice but they were unsuccessful for several reasons. First, the scent molecules migrate through the neoprene valves. Second, the cans would not spray a sufficient distance. Third, there was no way to determine how much liquid remained in the container. After months of experimentation the method of packaging shown was adopted.

It can be seen that the spray element is a bellows type squeeze bottle that can spray the scent about twenty feet. The container is very easy to direct toward the target and, being translucent, it is easy to determine the amount of liquid remaining to be sprayed. The squeeze bottle also avoids problems inherent in spray cans namely, cranky or non-working valves on the Aerosol cans and/or loss of propellant under cold weather conditions.

The plastic squeeze bottle filled with active BEAR SKUNKER ingredients is sealed in an aluminum pull top container. This arrangement is completely odorless, serves also to protect the squeeze bottle from damage on the trail. A leather thong is secured to the pull-top ring to facilitate very quick opening (this leather thong is not to be used as means for securing the can while being carried). A simple rubber band harness can be easily made up to fasten the BEAR SKUNKER container to belt or pack strap for carrying. A firm tug will release the can which will then be in the hand and ready to pull open with the leather thong.

FIELD TESTING

Once the packaging problem was solved the company embarked upon an extensive field testing program. As a preliminary step, a prominent writer of several articles on bears was asked to recommend someone to do field testing. At his suggestion the company contacted Dr. Charles Jonkel, the University of Montana, considered to be one of the world's foremost experts on bears. Dr. Jonkel agreed to do the testing which started in the Summer of 1981. Tests were conducted by Dr. Jonkel and Ms. Carrie Hunt, a graduate student working on her Masters Degree.

As expected, they concluded that bears do not like BEAR SKUNKER. One test that I witnessed involved a 300-pound black bear that had been trapped because it had been killing cattle. The bear was tranquilized, then transported to the

woods, and secured to a tree by a 15 foot cable attached to its front foot. After the bear had been fully revived, Dr. Jonkel approached it to create a diversion so that Ms. Hunt could hide unobserved in a blind built previously.

The bear was alert but calm as Dr. Jonkel approached. It was apparent that it had been testing the cable. After making certain that Ms. Hunt was in the blind, Dr. Jonkel retreated for a distance of several hundred yards, out of sight and downwind. The bear settled down.

After a half-hour interval Dr. Jonkel again approached the bear. This time however he carried a BEAR SKUNKER squeeze bottle filled with water rather than skunk scent. The objective was to establish a "control" against which the active ingredient could be measured.

As Dr. Jonkel approached, the bear stood up but remained quite calm, seeming to realize that it could not get away. There was about three feet of slack in the cable when Dr. Jonkel stopped about fifteen feet away. The doctor then held the squeeze bottle out in front, making threatening gestures and sounds that provoked the bear into lunging at him. He then squirted the water at and on the bear but without any deterring effect as the excited bear continued to lunge at him repeatedly despite the squirting. Dr. Jonkel then retreated and, according to Ms. Hunt's later report, the bear calmed down within a few minutes.

Within the hour Dr. Jonkel again approached the bear but this time with a squeeze bottle containing the active BEAR SKUNKER ingredient instead of water. Everything went as before only this time when the bear was induced into lunging, it was squirted with BEAR SKUNKER. The bear went into a crouch and put his head over his left front paw. Dr. Jonkel retreated again. He told me while we waited that the bear's reaction, namely, lowering its head over its paw, was some kind of a submissive gesture that in bear language, meant, "OK, I'll give up if you will." Ms. Hunt reported later that the bear cried and was very agitated, rubbing its face and pulling on the cable.

Approximately thirty minutes later, Dr. Jonkel again approached the bear. This time the objective was to create a diversion so that Ms. Hunt could leave the blind without being observed by the bear. However when Dr. Jonkel got to within about twenty yards the bear bolted and ran, hitting the end of his tether and some snuffing. Then in a panic he proceeded to climb the tree he was tied to with the greatest possible speed.

When Dr. Jonkel approached the bear the next day he could evoke only a negligible reaction despite

extreme close up threats and provocation. The bear obviously did not want to have anything more to do with BEAR SKUNKER.

In 1983, testing was done at a garbage dump in Sparwood, Canada. This testing involved putting BEAR SKUNKER on bait (food trays) and trying to spray bears with a remote control device. Neither method proved to be particularly successful. What we needed was a free ranging bear test.

In 1984, at the same garbage dump in Canada, Martin Smith, a bear biologist from the University of Montana, elected to ask a free approach bear test. Just before sundown he observed himself approach until a feeding bear approached to within about fifteen feet. He sprayed the bear with BEAR SKUNKER. The bear immediately bolted and ran from the dump into the woods, shaking its head. Later, Smith repeated the procedure. Another bear approached. This time Smith sprayed the bear with BEAR SKUNKER. The bear again bolted to establish whether he ran from BEAR SKUNKER or just because he was surprised with liquid. The bear bolted when sprayed with water but refused to leave its meal and continued eating. A short time later, Smith approached the same bear. This time he sprayed the active BEAR SKUNKER. The bear immediately bolted and ran from the dump conclusively proving the effectiveness of BEAR SKUNKER. These free approach tests were repeated several times in Sparwood and we were fortunate to get some of them on video tape.

BEAR SKUNKER is being marketed because it is a deterrent to exploring, curiosity or aggressive bear without making live only injury. In addition, unlike bullets, (face, olecranon, and forepaw) or other irritants, it is not necessary to actually hit the bear. It is warranted at least by its keen sense of smell. For example, if a hungry bear can wander into camp, you know the mother is close by. You want to get the cub to leave without injury, if which can engage the mother. Mother bears can be extremely aggressive in defending and protecting their cubs. If the cubs were sprayed with BEAR SKUNKER, the mother would be immediately alerted by the skunk scent and most likely will take her cub away.

Advocating that you take on the task of the skunk's ability to protect itself is not out of the sound biological advice. As the famous naturalist, John G. C. Mitchell Freidrich von Schlegel said so well, "Never in my life did I ever say one word about wisdom and a mother 'DO NOT' expect BEAR SKUNKER to make you absolutely bear proof" also, COMMIT feel free to seek out encounters with bears.

BEST AVAILABLE COPY