

Insecticides - Flea Powders and Sprays

Flea powders and sprays are used to kill or control household fleas. The ingredients found in some flea powders, collars, and sprays may include carbamates, carbaryl, lindane, limonene, pyrethrins, chlorpyrifos, and organo-phosphates. Many ingredients in flea powders and sprays are considered toxic, poisonous, or a skin or eye irritant.

Source Reduction **PREVENTS THE NEED FOR DISPOSAL**

To minimize the quantity of flea powder or spray that must be managed or the hazards associated with its use:

- buy and use only the quantity needed;
- purchase short-lived products (e.g. pyrethrin-based sprays)¹; and
- use up all of the flea powder or spray.

Fleas may be impossible to control without the use of flea powders or sprays; however, alternatives for controlling flea populations exist. These include the following:

- vacuum or steam clean the carpet often to remove eggs and larvae (changing the bag after each use);
- use a flea comb to remove the fleas off pets and then discard;
- wash the pet's bedding frequently;
- wash pets with insecticidal soap;
- ask your veterinarian about oral flea controls or once-a-month sprays for your pet;
- apply a dehydrating agent such as silica gel to a pet's bedding and carpet to kill the flea larvae and eggs; and
- use insect growth regulators² (such as lufenuron or methoprene) to prevent the development of adult fleas.

Recycling/Reuse Options **TRY THIS NEXT**

If you do not use all of the insecticide, you can offer it to a kennel, humane society, neighbor, or civic or charitable organizations that might have a use for it. Do not give away or use insecticides that are labeled “**Restricted Use**” or that have been banned. Only state-licensed applicators may apply “**Restricted Use**” insecticides. As this labeling requirement went into effect in 1983, commercial pesticides purchased before then may not have the warning “**Restricted Use**”. Contact the local county extension office or the EPA sponsored National Pesticide Telecommunications Network at

¹However these are not necessarily safer than carbamates or organo-phosphates.

²These work by interrupting the flea's reproductive cycle. They can be given orally to dogs and cats.

1-800-858-PEST for information on pesticides (including if the insecticide has been banned or is a restricted use insecticide). Flea powders and sprays are not recyclable.

☐ Disposal **LAST RESORT**

If the flea powder and spray cannot be used up or given away, then read and follow the product's label for the manufacturer's instructions on proper disposal.

Empty flea powder or spray container

If the container is empty, then triple rinse the container (using the rinse water as you would the product). The empty container should be recycled, if possible. A list of recycling sites can be accessed at 1-800-CLEANUP or www.1800cleanup.org on the Internet. If it cannot be recycled, then the empty container can be disposed of in a landfill.

Solidified flea products

Contact the local recycling coordinator to see if a HHW collection program is planned for your area. Their number can be accessed at 1-800-CLEANUP or www.1800cleanup.org on the Internet. In addition, the Department of Agriculture has a collection and disposal program for pesticides (focus on agricultural). For more information about their program, call (404) 656-4958. Under state law, if generated by household use, solidified flea powders or sprays can be legally disposed of in a permitted, Subtitle D landfill. Wrap the container in several layers of newspaper, and place in a landfill. Before attempting to dispose of flea powder or spray in this manner, contact the local landfill to find out if they meet this requirement. If curbside waste pick-up is provided, contact the service provider to find out if the waste is being disposed of in a landfill which meets this requirement.

Liquid flea products

Contact the local recycling coordinator to see if a HHW collection program is planned for your area. Their number can be accessed at 1-800-CLEANUP or www.1800cleanup.org on the Internet. In addition, the Department of Agriculture has a collection and disposal program for pesticides (focus on agricultural). For more information about their program, call (404) 656-4958. Under state law, solidified flea powders or those in aerosol cans can be legally disposed of in a permitted, Subtitle D landfill. To solidify the liquid flea products, mix the flea product with enough absorbent material such as sawdust to absorb all free liquids. Place the solidified flea product in a bag or wrap in newspaper before disposing in a landfill. The empty container should be triple rinsed (using the rinse water as you would the product) and recycled,

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if possible.

Flea products should not be poured down septic tanks, drains (inside or outside), into a storm sewer, or on the ground. This can cause ground water contamination and/or operational problems with the septic system or POTW.

☐ Storage Tips

To safely store insecticide, keep it in the original container with the label intact and refer to the product's label for additional information. Store the insecticide in an area inaccessible to children or pets.

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Indoor Insecticides

Insecticides are used indoors to control or kill household insects. Some of the ingredients in insecticides include organo-phosphates, carbamates, chlorpyrifos, petroleum distillates, and pyrethrins.³ Some older insecticides may contain compounds that are now banned or restricted for household use. Many insecticides contain ingredients that are considered toxic, flammable, an irritant, poisonous, or are slow to biodegrade.

To determine if you are dealing with a pesticide, read the container label or contact the manufacturer. Pesticides are divided into four categories. Category I pesticides, which should only be used by professionals with special training, are highly toxic and have the signal word “**Danger**” on the label. These products may also contain the word “**Poison**” on the label or a skull and cross bones. Homeowners should not purchase pesticides in the “**Danger**” category unless they have special training. Category II pesticides are moderately toxic and have the signal word “**Warning**” on the label. Category III pesticides are slightly toxic and have the signal word “**Caution**” on the label. Category IV pesticides are relatively non-toxic and have the signal word “**Caution**” on the label.

Source Reduction **PREVENTS THE NEED FOR DISPOSAL**

There are alternatives to using insecticides. One way is to reduce insect populations by:

- working to prevent insects from entering your home by caulking or covering entry ways such as holes, cracks, or gaps around pipes and electric lines or screening windows and vents;
- keeping food covered and not leaving any food, including pet food, out at night;
- preventing dampness under sinks and around toilets;
- removing hiding places for insects such as piles of old newspapers and garbage bags; and
- cleaning up ants and their trail with soapy water, and sealing the opening where they are entering the house.

If insects appear, consider using insect growth regulators (such as fire ant or roach baits) or traps before using insecticides. If you must purchase and use insecticides:

- purchase and use only as much as needed;
- buy products that are designed specifically for the pest;
- buy the least toxic product possible;
- make sure it is labeled for the area where it is going to be used;
- follow label directions closely (as they are your best source for safe use directions);
- make spot applications rather than broad applications;

³Pyrethrins are a less toxic ingredient derived from chrysanthemums.

- avoid storing products for long periods of time (since they may become less effective); and
- use up all of the product (if you can not use the products up, try offering it to civic or charitable organizations that might have a use for it.)

By following these suggestions, you can minimize the amount of products that must be managed or the hazards associated with its use.

Recycling/Reuse Options **TRY THIS NEXT**

If you do not use all of the insecticide, you can offer it to civic or charitable organizations that might have a use for it. Do not give away or use insecticides that are labeled “**Restricted Use**” or that have been banned. Only state-licensed applicators may apply “**Restricted Use**” insecticides. Insecticides are not recyclable. However, the pesticide containers may be recycled. Contact the local recycling center to determine if your community has a program to recycle pesticide containers. Their number can be accessed at 1-800-CLEANUP or www.1800cleanup.org on the Internet. To recycle, triple rinse the container using the rinse water as you would the pesticide.

Disposal **LAST RESORT**

If the insecticide cannot be used up or given away, then read and follow the product’s label for the manufacturer’s instructions on proper disposal.

Empty insecticide container

If the container is empty, then triple rinse the container (using the rinse water as you would the product). The empty container should be recycled, if possible. If it can not be recycled, then the empty container can be disposed of in a landfill.

Solidified insecticides

Contact the local recycling coordinator to see if a HHW collection program is planned for your area. Their number can be accessed at 1-800-CLEANUP or www.1800cleanup.org on the Internet. In addition, the Department of Agriculture has a collection and disposal program for pesticides (focus on agricultural). For more information about their program, call (404) 656-4958. Under state law, if generated by household use, solidified insecticides and those in aerosol cans may be legally disposed of in a permitted, Subtitle D landfill. Wrap the container in several layers of newspaper, and place in a landfill. Before attempting to dispose of insecticides in this manner, contact the local landfill to find out if they meet this requirement. If curbside waste pick-up is provided, contact the service provider to find out if the waste is being disposed of in a landfill which meets this requirement.

Liquid insecticides

Contact the local recycling coordinator to see if a HHW collection program is planned for your area. Their number can be accessed at 1-800-CLEANUP or www.1800cleanup.org on the Internet. In addition, the Department of Agriculture has a collection and disposal program for pesticides (focus on

agricultural). For more information about their program, call (404) 656-4958. If generated by household use, solidified liquid insecticide can be legally disposed of in a Subtitle D landfill. To solidify the liquid insecticide, mix the insecticide with enough absorbent material such as shredded newspaper or sawdust to absorb all free liquids. Place the solidified insecticides in a bag or wrap in newspaper before disposing in a landfill. The empty container should be triple rinsed (using the rinse water as you would the product) and recycled, if possible. If it cannot be recycled, then the empty container can be disposed of in a landfill.

Insecticides should not be poured down septic tanks, drains (inside or outside), or into a storm sewer. This can cause ground water contamination and/or operational problems with the septic system or POTW.

☐ Storage Tips

To safely store an insecticide, keep it in the original container with the label intact and refer to the product's label for additional information. Store the insecticide in an area inaccessible to children or pets.

Lawn Care Products

Lawn care products include insecticides to control insects, herbicides to control weeds, and fungicides/bactericides used to control mildew, bacteria, and other microorganisms. Insecticides, herbicides, and fungicides may contain one or more of the following: glyphosate, captan, anilazine, chlorpyrifos, carbaryl, petroleum distillates, and pyrethrins. Some of the ingredients in lawn care products are considered toxic, poisonous, and an eye and skin irritant.

Some fertilizers contain pesticides. To determine if you are dealing with a pesticide, read the container label or contact the manufacturer. Pesticides are divided into four categories. Category I pesticides, which should only be used by professionals with special training, are highly toxic and have the signal word “**Danger**” on the label. These products may also contain the word “**Poison**” on the label or a skull and cross bones. Category II pesticides are moderately toxic and have the signal word “**Warning**” on the label. Category III pesticides are slightly toxic and have the signal word “**Caution**” on the label. Category IV pesticides are relatively non-toxic and have the signal word “**Caution**” on the label.

Source Reduction **PREVENTS THE NEED FOR DISPOSAL**

Alternatives to hazardous lawn care products exist. One approach to reducing the use of pesticide is to use integrated pest management (IPM) practices. IPM uses physical (manually removing weeds), biological (using lady bugs or other natural predators), and chemical (using the least toxic pesticides) controls to maintain a healthy lawn. If garden plants and lawns are healthy and suitable for the location, then there are fewer weeds, diseases, and pests; and consequently, there is less need for pesticides. Also remember that it is not always necessary to remove every weed or insect from the lawn. In order to decrease the likelihood of infestation by pests, contact the local county extension office on how to keep plants healthy and for a list of disease-resistant plants that are suitable for your area. The county extension office will also have advice on the use of beneficial insects and environmentally benign pesticides like insecticidal soap. A list of County Extension Agents may be found at <http://128.192.110.246/CountyCoordinators.cfm> or by calling (706) 542-1060. Other ways to reduce pesticide use and maintain a healthy lawn include:

- adjusting the pH of your lawn (contact your local extension office for instructions);
- avoiding cutting your lawn too short or using a dull blade;
- watering deeply rather than often;
leave grass clippings and leaves on your lawn (once decomposed it is a fertilizer);
- weeding by hand or using a hoe; and
- using pest traps or baits.

If you must purchase and use a lawn care product,

- purchase and use only as much as needed;
- buy the least toxic product possible;
- make sure it is labeled for the area where it is going to be used;
- follow label directions closely (as they are your best source for safe use directions);
- make spot applications rather than broad applications;
- avoid storing products for long periods of time (since they may become less effective); and
- use up all of the product (if you can not use the products up, try offering it to civic or charitable organizations that might have a use for it.)

By following these suggestions, you can minimize the amount of products that must be managed or the hazards associated with its use.

Reuse/Recycling Options TRY THIS NEXT

If you cannot use it all up, then give it away to a neighbor, or a civic or charitable organization. Do not use or give away products that are labeled “**Restricted Use**” or that have been banned. Only state-licensed applicators may apply “**Restricted Use**” insecticides. Contact the local county extension office or the EPA sponsored National Pesticide Telecommunications Network at 1-800-858-PEST for additional information on pesticides (including if the pesticide has been banned or is a restricted use pesticide). Lawn care products are not recyclable. A list of all the County Extension agents may be found on the Internet at <http://128.192.110.246/CountyCoordinators.cfm> or by calling (706) 542-1060. Some pesticide containers may be recycled; contact the local recycling center to determine if your community has a program to recycle pesticide containers. To recycle, triple rinse the container using the rinse water as you would the pesticide.

Disposal TRY THIS NEXT

If the lawn care product cannot be used up or given away, then read and follow the product’s label for the manufacturer’s instructions on proper disposal.

Empty insecticide container

If the container is empty, then triple rinse the container (using the rinse water as you would the product). The empty container should be recycled, if possible. If it cannot be recycled, then the empty container can be disposed of in a landfill.

Solidified lawn care products

Contact the local recycling coordinator to see if a HHW collection program is planned for your area. Their number can be accessed at 1-800-CLEANUP or www.1800cleanup.org on the Internet. In addition, the Department of Agriculture has a collection and disposal program for pesticides (focus on agricultural). For more information about their program, call (404) 656-4958. Under state law, if generated by household use, solidified lawn care products can be legally disposed of in a permitted, Subtitle D landfill. Wrap the container in several layers of newspaper, tape securely, and place in a landfill. Before attempting to dispose of lawn care products in this manner, contact the local landfill to find out if they meet this requirement. If curbside waste pick-up is provided, contact the service provider to find out if the waste is being disposed of in a landfill which meets this requirement.

Liquid lawn care products

Contact the local recycling coordinator to see if a HHW collection program is planned for your area. Their number can be accessed at 1-800-CLEANUP or www.1800cleanup.org on the Internet. In addition, the Department of Agriculture has a collection and disposal program for pesticides (focus on agricultural). For more information about their program, call (404) 656-4958. If generated by household use, solidified liquid lawn care products can be legally disposed of in a Subtitle D landfill. To solidify the liquid lawn care products, mix the lawn care products with enough absorbent material such as shredded newspaper or

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sawdust to absorb all free liquids. Place the solidified lawn care products in a bag or wrap in newspaper before disposing in a landfill. The empty container should be triple rinsed (using the rinse water as you would the product) and recycled, if possible.

☐ Storage Tips

To safely store lawn care products, keep it in the original container with the label intact and refer to the product's label for additional information. Store the products in an area inaccessible to children or pets.