

# Diatomaceous Earth: Nature's Little Miracle for Insect Control

Insects are a continuous problem for anyone from home owners and renters, to gardeners and business owners. Controlling insects is a tireless struggle that typically involved chemicals, and sometimes even quarantining a particular room so that you could eliminate an insect infestation.

With the recent spread of bed bugs, and as we enter the warmer season, crawling insects are becoming an increasingly prevalent issue. The problem with many common insect killers is that they use synthetic chemicals which can leave harmful residuals in your home or garden. One tidbit about synthetic chemicals many people were unaware of is that insects can actually develop an immunity to synthetic chemicals, rendering them useless. With the green movement in full swing, consumers are looking for a natural solution that not only eliminates insects, but does not harm the environment.

Diatomaceous Earth has surged in popularity over the past year due to its multitude of benefits as an insect killer. While you have surely heard the words, but you might be aware of what exactly Diatomaceous Earth is and how it eliminates insects without harming the environment.

# So What is Diatomaceous Earth??

Diatomaceous Earth is a naturally occurring, soft sedimentary rock that is presented for use in the form of powder. Diatomaceous earth consists of fossilized remains of diatoms, a hard shelled algae-like plant. Diatomaceous Earth can be used as a filtration aid (although that is a separate form of Diatomaceous Earth then is used in Safer Brand products), as a mild abrasive, and a mechanical insecticide.



Warning!!! Not all DE (as it is often termed) is the same!! DE used in swimming pool filters can be derived from unnatural sources and has been linked to cancer. Diatomite as it is often called, is heat treated and causes the Diatomite to assume crystalline form.

Diatomaceous Earth used as a mechanical insecticide is developed from fresh water sources and is known as amorphous diatomaceous earth. This is the formula used in Safer Brand Ant and Crawling Insect Killer.

DE is a highly porous material that if handled, feels a lot like talcum powder, but due to its highly porous absorptive nature, can dry out your hands quickly.

# How does Diatomaceous Earth work??

DE is basically a lethal dust lined with microscopic razor sharp edges. DE is effective for insect control through various methods. Given its highly porous nature, Ingestion of this lethal powder by the insect will cause them to dehydrate from the inside out, as well as shredding their inside. This process happens quickly, usually within a few minutes. Since DE is loaded with microscopic razor sharp edges (from an insect's perspective), as insects cross over the powder, the edges cut through the insect's protective exoskeleton, and causes the insect to dehydrate from the outside in. Since DE is a mechnical insecticide, insects can not develop an immunity to DE and it can be used to control insects for a long time.

#### How long does Diatomaceous Earth last??

As long as DE stays dry, it is effective!! Since DE is highly porous, exposure to rain and other liquids, would require reapplication.

## What type of insects will Diatomaceous Earth work on??

Since DE works in various ways, it is effective on bed bugs, beetles, thrips, mites, ants, roaches, aphids, slugs, snails, fleas, pillbugs, ticks, crickets, millipedes/centipedes, and earwigs, among others.

Safer Brand Ant and Crawling Insect Killer is powered by amorphous diatomaceous earth with a powerful bait formula to attract and kill crawling insects. Have insect problems, join the thousands of other people who have made the Safer Brand choice and used a DE powder that is OMRI Listed to be organic!

## **References:**

- "Inert Dusts", Bhadriraju Subramanyam and Rennie Roesli, Kansas State University pg. 325-331
- <u>http://www.saferbrand.com/store/insect-control/51702</u>