

CDC Recommends 2-Undecanone to Prevent Mosquito & Tick-Borne Diseases

CDC has recently announced that it recommends EPA-registered insect repellent with 2-undecanone for control of diseases associated with bites from ticks and mosquitoes. 2-undecanone is an EPA-registered natural compound from leaves and stems of the wild tomato plant, *Lycopersicon hirsutum*. Bite Blocker with BioUD formula is the only EPA-registered product containing 2-undecanone as an insect repellent. [EPA registration information is available here.](#)

Bite Blocker BioUD is classified by the Environmental Protection Agency as a biopesticide product. Biopesticides are inherently less toxic than conventional pesticides. The EPA defines biopesticides as certain types of pesticides derived from such materials as animals, plants, bacteria, and certain minerals. The Bite Blocker BioUD insect repellent spray is formulated from a base of soy, coconut, and other vegetable and plant based extracts.

EPA has four categories of toxicity, ranging from I to IV, with I being the most toxic and IV being the least toxic. The actives, DEET and Picaridin are category III. However, to achieve effectiveness, these formulations require the addition of flammable ethanol and other toxic ingredients. The insect repellent active, P-Menthane-3,8-diol (PMD), the chemically synthesized version of a compound found in lemon eucalyptus, is category I. This is the most toxic EPA category, although final formulations may be in a slightly lower toxicity category such as Repel Lemon Eucalyptus which EPA lists as toxicity category II. Bite Blocker BioUD is in the least toxic category, category IV.

Many EPA registered insect repellents are flammable. The Bite Blocker BioUD formulation is nonflammable and is not a plasticizer. It is truly the least toxic natural product proven repeatedly to be effective. It is safe for use on pregnant women, children, and the elderly. It can be reapplied as often as needed.

EPA field studies and USDA lab studies determined that Bite Blocker BioUD protects against mosquitoes for up to 5 hours. In field trials conducted by NC State comparing the repellency of BioUD to products containing 25 and 30% deet, BioUD provided the same repellency or was more effective than 25 and 30% deet. In other peer reviewed NC State studies, BioUD outperformed Permethrin, DEET, Picaridin, IR3535, & Lemon of Eucalyptus as a tick repellent.

In a joint statement, EPA and CDC reported that mosquito-transmitted West Nile virus caused over 36,000 disease cases and 1,500 deaths in the United States between 1999 and 2012 (CDC, 2012). Additionally, the statement estimated that there are about 300,000 cases of tick-transmitted Lyme disease in the United States each year (Hinckley et al, 2014). CDC lists 4,710 travel-associated Zika cases reported in the United States as of January 25, 2017. [Access CDC reporting of Zika cases here.](#)

Bite Blocker BioUD adds tick repellency to mosquito protection so that it is recommended by CDC and health professionals who are aware of the dangers of other formulations for both mosquito and tick-borne diseases including Zika, West Nile Virus, Lyme Disease, Rocky Mountain Spotted Fever and others.

Find out more about the dangers with most insect repellents and access information on how to make an informed choice on www.consumerchoice.green. Visit homs.com to learn more about Bite Blocker BioUD and to purchase.