

# DIY Bug Repellent

## DIY Bug Repellent Recipe

- 2 tbsp - Witch Hazel
- 1 1/2 tbsp - 91% Isopropyl Alcohol (rubbing alcohol)
- 1/2 tbsp - Vegetable Glycerin
- 12 drops Lemon Eucalyptus Essential Oil
- 12 drops Shield Me Essential Oil
- 12 drops Vanilla Oleoresin Essential Oil

### Step 1

Mix essential oils with isopropyl alcohol. Be sure to blend well. Allow to sit while adding other ingredients to bottle

### Step 2

Add witch hazel and vegetable glycerin to spray bottle.

### Step 3

Add isopropyl alcohol and essential oil mix to bottle. Shake well to blend.

**To use, spray on skin and spread evenly with hand.**

This recipe creates a 2% dilution of the essential oils. This is usually considered safe for children 2 years of age and up. It is always wise to use caution when trying new products, and natural products are no different. It is recommended that you perform a skin test prior to using the product, especially on children, to ensure there are no adverse reactions. To perform a skin test, shake the product vigorously and apply a small amount to a patch of skin. Wait 24 hours and watch for signs of a reaction. If a reaction occurs, discontinue further use.



# Benefits of Ingredients

**Witch hazel** has anti-inflammatory, antimicrobial, astringent and moisturizing properties when used on the skin.

**Isopropyl alcohol** when used at an alcohol concentration of 60% or above acts as a mild emulsifier to help essential oils blend and disperse consistently in a water-based formulation. Without the use of a dispersant or a solubilizing agent essential oils will not mix well with water and may not remain diluted. You can also replace the dispersant or solubilizing agent with an emulsifier made for water and oil formulations or replace the water-based ingredients with your choice of carrier oil, such as, fractionated coconut oil. Using a carrier oil instead of a water-base is suggested for situations where the skin will encounter water.

**Vegetable glycerin** acts as a natural humectant and in this recipe helps the mixture remain on the skin for longer lasting protection from bugs.

**Lemon Eucalyptus Essential Oil** is oil from the *Eucalyptus citriodora* plant, originating in Madagascar. Emerging studies suggest that Lemon Eucalyptus may be effective in deterring insects and provide an alternative to DEET-based repellents.

**Shield Me Essential Oil** is a Plant Therapy blend of the essential oils, Citronella, Grapefruit, Geranium Bourbon, Rosalina and Patchouli. Many of these oils are thought to provide an effective barrier against outdoor annoyances. Some studies suggest that Geranium oils are as effective or more so at repelling ticks, than commercially available repellents. It should be noted, however, that many of these studies are in the early stages and more studies are needed to confirm the findings, but the findings are, none the less, still encouraging.

**Vanilla Oleoresin** or *Vanilla planifolia* has a high concentration of Vanillin. Vanillin is often added to perfumes to slow the evaporation rate, making the scent last longer. Essential oils tend to evaporate very quickly. The addition of Vanilla Oleoresin to this mixture reduces the volatility of the oils and extends the protection of the natural repellent.