## Frontline (fipronil) Spray Recipe & Directions

## Dr. Steve Hull

## Materials needed:

- Frontline or Frontline Plus "spot on" flea control for 89-132 lb dogs
- Isopropyl alcohol (90% or greater)
- Measuring cup (glass or Pyrex)
- Empty 250 ml Frontline spray bottle
- Vinyl gloves (just to be extra safe)

## Instructions:

From a veterinarian, buy a package of Frontline (or Frontline Plus) flea control for dogs, 89-132 lbs (no substitutions). Each Frontline package contains three plastic "spot on" applicators. Each applicator pouch contains 4.02 ml of the active ingredient "fipronil" in alcohol at a concentration of 9.8%.

Also purchase a bottle of 90% or greater isopropyl alcohol. This is not a prescription item (available at WalMart, CVS, Walgreens, most grocery stores, etc).

Get a glass measuring cup.

Put on gloves. Pour 8.5 fl oz (250 ml) of isopropyl alcohol into measuring cup. Remove spray head from empty Frontline spray bottle (I needed a pliers to do this). Carefully, pour this 250 ml volume of isopropyl alcohol into the empty Frontline Spray bottle.

Add the content of two Frontline applicators (4.02 ml each) by snapping the prescored neck of the applicator and squirting the concentrated 9.8% Frontline liquid into the spray bottle containing alcohol. This dilution is critical.

Replace spray head and shake spray bottle. Remove gloves and throw away.

This is now a 0.29% fipronil solution of Frontline Spray. Use spray bottle as directed.