

How to Mix Insecticides

1. How to mix wettable powder for spraying:

If you have 50 percent Carbaryl wettable powder and want to make 50 gallons of spray containing 0.5 percent Carbaryl, use the following formula: (water weighs 8.345 pounds/gallon)

$\frac{\text{Gallons desired} \times \text{weight of water} \times \text{desired concentration}}{\% \text{ active ingredient in insecticide used}} = \text{pounds of wettable powder}$

$$\frac{50 \text{ gallons} \times 8.345 \times 0.5}{50} = 4.17 \text{ pounds}$$

4.17 pounds of the 50 percent Carbaryl will be to make 50 gallons of 0.5 percent Carbaryl.

2. How to mix emulsifiable concentrate for spraying:

If you have 50 percent Malathion emulsifiable concentrate and want to make 2 percent spray, use the following formula:

$$\frac{\% \text{ insecticide}}{\text{Desired concentration}} = \frac{50}{2} = 25$$

The correct dilution is 1 part of the Malathion to 25 parts of water.

3. How to mix dusts:

If you have 25 percent Malathion dust and want to make 100 pounds of dust containing 5 percent Malathion, use the following formula:

$$\frac{\text{Desired concentration} \times 100 \text{ pounds}}{\% \text{ active ingredient in insecticide used}} = \text{factor}$$

$$\frac{5 \times 100}{25} = 20$$

20 pounds of the Malathion dust should be added to 80 pounds diluents to make 100 pounds of 5 percent dust.