Insecticide Dilution Tables

Table 1. Amount of formulated insecticide materials to use to provide the indicated active ingredient.

Formulation	0.25 pound/ acre	0.50 pound/ acre	0.75 pound/ acre	1.0 pound/ acre	1.25 pounds/ acre	1.5 pounds/ acre	2.0 pounds/ acre
1% Dust	25.0 pounds	50.0 pounds	75.0 pounds	100.0 pounds	125.0 pounds	150.0 pounds	200.0 pounds
5% Dust	5.0 pounds	10.0 pounds	15.0 pounds	20.0 pounds	25.0 pounds	30.0 pounds	40.0 pounds
10% Dust	2.5 pounds	5.0 pounds	7.5 pounds	10.0 pounds	12.5 pounds	15.0 pounds	20.0 pounds
25% WP	1.0 pound	2.0 pounds	3.0 pounds	4.0 pounds	5.0 pounds	6.0 pounds	8.0 pounds
40% WP	2/3 pound	1.25 pounds	1 7/8 pounds	2.5 pounds	3 1/6 pounds	3.75 pounds	5.0 pounds
50% WP	0.5 pound	1.0 pound	1.5 pounds	2.0 pounds	2.5 pounds	3.0 pounds	4.0 pounds
75% WP	1/3 pound	2/3 pound	1.0 pound	1 1/3 pounds	1 2/3 pounds	2.0 pounds	2 2/3 pounds
1 pound/gal. EC	1.0 quart	2.0 quarts	3.0 quarts	4.0 quarts	5.0 quarts	6.0 quarts	8.0 quarts
1.5 pounds/gal. EC	2/3 quart	1 1/3 quarts	2.0 quarts	2 2/3 quarts	3 1/3 quarts	4.0 quarts	5 1/3 quarts
2 pounds/gal. EC	1.0 pint	1.0 quart	3.0 quarts	2.0 quarts	5.0 pints	3.0 quarts	2.0 quarts
4 pounds/gal. EC	0.5 pint	1.0 pint	1.5 pints	1.0 quart	2.5 pints	3.0 pints	2.0 quarts
6 pounds/gal. EC	1/3 pint	2/3 pint	1.0 pint	1 1/3 pints	1 2/3 pints	2.0 pints	2 2/3 pints
8 pounds/gal. EC	0.25 pint	0.5 pint	0.75 pint	1.0 pint	1.25 pints	1.5 pints	2.0 pints

EXAMPLE: You wish to apply an insecticide at the rate of 1 pound (active ingredient) per acre and you purchase an emulsifiable concentrate (EC) formulation containing 2 pounds (active ingredient) per gallon. From the table above, you find that 2 quarts of the formulation are needed per acre to provide the desired dosage.

The tables below provide a quick reference to determine the amount of insecticide to mix with different amounts of water to obtain the same concentration of spray.

Example: **1 cup** of liquid insecticide in **100 gallons** of water makes **the same spray concentration** as **4 tablespoons** in **25 gallons**.

Table 2. For use with liquid insecticide.

Amount of Water Used	Amount of Liquid Insecticide			
100 gallons	1 cup	1 pint	1 quart	2 quarts
50 gallons	0.5 cup	1 cup	1 pint	1 quart
25 gallons	4 tablespoons	0.5 cup	1 cup	1 pint
2.5 gallons	1.5 teaspoons	2.5 teaspoons	5 teaspoons	10 tablespoons
1 gallon	0.5 teaspoon	1.0 teaspoon	2 teaspoons	4 teaspoons

Table 3. For use with wettable powder insecticides.

Amount of Water Used	Amount of Wettable Powder Insecticide			
100 gallons	1 pound	2 pounds	3 pounds	5 pounds
50 gallons	0.5 pound	1 pound	1.5 pounds	2.5 pounds
25 gallons	0.25 pound	0.5 pound	0.75 pound	1.25 pounds
3 gallons	2 tablespoons	3 tablespoons	5 tablespoons	8 tablespoons
1 gallon	2 teaspoons	1 tablespoon	1.5 tablespoons	2.5 tablespoons

Table 4. Read across from the insecticide formulation you have and down from the concentration of the insecticide you want in the spray. The amount of insecticide to mix with 1 gallon of water to make that concentration is indicated at the point the lines meet.

WETTABLE POWDER (WP)

Insecticide Formulation	The Concentration of Actual Chemical Wanted in the Spray Solution								
	0.0313%	0.0625%	0.125%	0.25%	0.5%	1.0%	2.0%	3.0%	5.0%
15% WP	2.5 teaspoons	5.0 teaspoons	10.0 teaspoons	7.0 tablespoons	1.0 cup	2.0 cups	4.0 cups	6.0 cups	10.0 cups
25% WP	1.5 teaspoons	3.0 teaspoons	6.0 teaspoons	12.0 teaspoons	8.0 tablespoons	1.0 cup	2.0 cups	3.0 cups	5.0 cups
40% WP	1.0 teaspoon	2.0 teaspoons	4.0 teaspoons	8.0 teaspoons	5.0 tablespoons	10.0 tablespoons	1.25 cups	2.0 cups	3.25 cups
50% WP	0.75 teaspoons	1.5 teaspoons	3.0 teaspoons	6.0 teaspoons	4.0 tablespoons	8.0 tablespoons	1.0 cup	1.5 cups	2.5 cups
75% WP	0.5 teaspoon	1.0 teaspoon	2.0 teaspoons	4.0 teaspoons	3.0 teaspoons	5.0 tablespoons	10.0 tablespoons	1.0 cup	2.0 cups

EMULSIFIABLE CONCENTRATE (EC)

Insecticide Formulation	The Concentration of Actual Chemical Wanted in the Spray Solution								
	0.0313%	0.0625%	0.125%	0.25%	0.5%	1.0%	2.0%	3.0%	5.0%
10%-12% EC 1 pound actual/gal	2.0 teaspoons	4.0 teaspoons	8.0 teaspoons	16.0 teaspoons	10.0 tablespoons	2/3 pint	1 1/3 pints	1.0 quart	3.25 pints
15%-20% EC 1.5 pounds actual/gal	1.5 teaspoons	3.0 teaspoons	6.0 teaspoons	12.0 teaspoons	7.5 teaspoons	0.5 pint	1.0 pint	1.5 pints	2.5 pints
25% EC 2 pounds actual/gal	1.0 teaspoons	2.0 teaspoons	4.0 teaspoons	8.0 teaspoons	5.0 tablespoons	10.0 tablespoons	2/3 pint	1.0 pint	1.75 pints
33%-35% EC 3 pounds actual/gal	0.75 teaspoon	1.5 teaspoons	3.0 teaspoons	6.0 teaspoons	4.0 tablespoons	8.0 tablespoons	0.5 pint	0.75 pint	1 1/3 pints

Insecticide Formulation	The Concentration of Actual Chemical Wanted in the Spray Solution								
	0.0313%	0.0625%	0.125%	0.25%	0.5%	1.0%	2.0%	3.0%	5.0%
40%-50% EC 4 pounds actual/gal	0.5 teaspoon	1.0 teaspoon	2.0 teaspoons	4.0 teaspoons	8.0 teaspoons	5.0 tablespoons	10.0 tablespoons	0.5 pint	4/5 pint
57% EC 5 pounds actual/gal	7/16 teaspoon	7/8 teaspoon	1.75 teaspoons	3.5 teaspoons	7.0 teaspoons	0.5 tablespoons	9.0 tablespoons	14.0 tablespoons	1.5 cups
60%-65% EC 6 pounds actual/gal	3/8 teaspoon	0.75 teaspoon	0.5 tablespoons	1.0 tablespoons	2.0 tablespoons	4.0 tablespoons	8.0 tablespoons	12.0 tablespoons	1.5 cups
70%-75% EC 8 pounds actual/gal	0.25 teaspoon	0.5 teaspoon	1.0 teaspoon	2.0 teaspoons	4.0 teaspoons	8.0 teaspoons	5.0 tablespoons	7.5 tablespoons	13.0 tablespoons